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10-219

ANNUAL  
ANNOUNCEMENT OF LECTURES

IN THE



Atlanta Medical College,

FOR THE

SESSION OF 1857,

WITH A CATALOGUE OF THE

STUDENTS AND GRADUATES

OF

NUMBER



Atlanta, Georgia:  
C. R. HANLEITER & CO., PRINTERS.  
1856

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~~~~~  
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*Demonstrator of Anatomy.*

~~~~~  
**J. G. McLIN, Janitor.**



## ANNOUNCEMENT.

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THE third Course of Lectures in this Institution will commence on the first Monday in May next, and continue four months.

The Trustees and Faculty of the Atlanta Medical College take pleasure in announcing the next Course of Lectures to the friends and Alumni of the Institution; and in doing so, cannot refrain from expressing their gratification at the success which has followed their organization for the establishment of a permanent and popular Summer School of Medicine in the South.

Such a School, it seemed to them, was required—aye, demanded—by the wants of the Medical Student; and from the patronage it has, and is likely to receive, sufficient evidence is afforded of the correctness of their views.

The last Session, with an increase of over twenty-five per cent. upon the first, gives assurance of the permanance and prosperity of the Institution beyond all cavil.

The intimate connection of Atlanta with the various sections of the Union, by the almost unequaled railroad facilities, already in existence, and its unexampled healthfulness, make this City eminently desirable for its location. Away from the localities where pestiferous plagues, in the epidemic form, infect the whole of those marshy and alluvial districts, Atlanta, though perhaps not better adapted to the purpose of Medical education during the winter months, is eminently so in summer.

The Faculty are glad to know that their efforts to afford the necessary facilities for the study of Medicine in its various branches, have not been unsuccessful, in the opinion of the Class, and those of the profession who have visited the Institution.

Not satisfied with this, however, the Faculty have determined that the departments of Anatomy and Surgery shall be furnished with additional means to facilitate the study of those important branches of medical science. The Professor of Surgery, who is now *en route* for Europe, will, during his stay in Paris, make such additions to his Cabinet of Surgical instruments and specimens as are necessary for the more thorough and perfect teaching of practical Surgery. The Professor of Anatomy will spend several months from home during the winter and spring, in preparing and collecting such anatomical preparations, models, plates &c., as will be useful additions to his present collection.

The inconveniences attendant upon a course of lectures in a building not adapted to lecturing, particularly on Anatomy, Surgery and Chemistry, will be avoided by the occupancy, at the next Session, of the College building, the massive granite walls of which are now completed. Contracts for roofing, &c., are already made, and will be rapidly carried out; so that not only will ample lecture rooms be in readiness, but a spacious and airy dissecting room, in the upper story of the building. This, together with an abundant supply of sound and well preserved material, will add greatly to the comfort and convenience of the student and teacher of Practical Anatomy.

In the preservation and storage of subjects, those entrusted with that service heretofore in this Institution, have found no little inconvenience in the want of suitable rooms, yet the fact, it is thought, is fully established, that dissections can be prosecuted with as much comfort and advantage to the student, in summer as in winter. If any yet doubt, they are invited to visit the dissecting room of the Atlanta Medical College, any time from the 15th of April to the middle of August next, to have those doubts removed. The dissecting room will be opened under the direction of the Demonstrator of Anatomy by the 15th of April, for any who may wish to dissect.

The Laboratory, furnished from the best manufactories in Boston, New York and Philadelphia, by the Professor of Chemistry in person, contains a selection of apparatus and chemicals rarely surpassed. Owing to detention in transportation, several important articles of apparatus did not arrive in time to meet that part of the course of lectures on Chemistry in which they were required the past Session. The full amount, however, thus selected by the experienced Professor, together with those purchased for the first course of lectures will be arranged in an ample Laboratory in the new College building. The Trustees feel no hesitation in saying that more efficient *means* for teaching Chemical Science is not afforded by any School North or South.

The Chairs of Obstetrics, Physiology, Practice and Materia Medica will, more abundantly than heretofore, be supplied with the requisite specimens, models, plates, &c., for instruction in these several branches.

Clinical instruction, as heretofore, will be given at the College twice a week, and once a week at the Infirmary. This very advantageous mode of giving practical instruction in Medicine and Surgery cannot be too highly prized by the Student of Medicine; and the Faculty, or those of them upon whom this duty devolves, will spare no pains to make the Medical and Surgical Clinique highly interesting and practical to the Class.

## Requisites for Graduation.

In order to be admitted to examination for the Degree of Doctor of Medicine, the applicant must be twenty-one years old, and of good moral character.

He must have been engaged in the study of Medicine the usual length of time, under the direction of a competent instructor.

Two full courses of lectures are required, the last of which must be in this Institution.

A Thesis on some medical subject, in his own handwriting, must be presented to the Dean of the Faculty, at least one month before the close of lectures.

The Faculty reserves the right to revoke the degree, if, from satisfactory evidence, they believe him upon whom it was conferred to be engaged in irregular or unprofessional practices.

## Fees for the Course.

|  |       |
|--|-------|
| For the Course of Lectures,.....                         | \$105 |
| Matriculation, (paid once only,).....                    | 5     |
| Dissecting Ticket, (required only once,).....            | 10    |
| Graduation,.....   | 25    |
| Good boarding can be obtained for \$3 to \$3 50 per week |       |



# CATALOGUE OF STUDENTS.

---

| <i>Names.</i>             | <i>Residence.</i>       | <i>Preceptors.</i>         |
|---------------------------|-------------------------|----------------------------|
| Edward L. Calhoun,.....   | Atlanta, Georgia.....   | E. N. Calhoun.             |
| Eli Griffin,.....         | Atlanta, Georgia.....   | J. G. & W. F. Westmoreland |
| F. M. Davis,.....         | Atlanta, Georgia.....   | “ “                        |
| M. J. Brinson,.....       | Millen, Georgia.....    | E. Leroy Anthony.          |
| J. C. Respass,.....       | Waynansville, Ga....    | Mathews & Green.           |
| John J. Boring,.....      | Nance's Creek, Ga....   | A. N. Clardy.              |
| James R. Biggs,.....      | Buena Vista, Ga.....    | M. Harvey.                 |
| J. M. Harwell,.....       | Shady Dale, Ga.....     | S. A. Hough.               |
| J. J. Montgomery,.....    | Cornucopia, Ga.....     | C. L. & J. B. Ridley.      |
| A. M. Boyd,.....          | Cave Spring, Ga.....    | W. A. Culbertson.          |
| A. H. Shi,.....           | Oxford, Georgia.....    | Hough & Perry.             |
| Wm. B. Couch, .....       | Location, Georgia.....  | J. M. Couch.               |
| A. S. Mayson,.....        | Atlanta, Georgia,.....  | J. F. Alexander.           |
| E. A. Leggitt,.....       | Montezuma, Ga.....      | Mathews & Green.           |
| B. C. Mayson,.....        | Longmires, S. C.....    | J. C. Lanier.              |
| James F. Brown, .....     | Decatur, Georgia.....   | M. F. Liddell.             |
| Sam'l G. Benson,.....     | Woodstock, Ga.....      | W. H. Dean.                |
| O. H. Jones,.....         | Atlanta, Georgia.....   | Wilson & Oliver.           |
| W. H. Sherman,.....       | Decatur, Georgia.....   | Hoyle & Rivers.            |
| H. J. Sanders, .....      | Clinton, Alabama.....   | C. P. Sanders.             |
| J. C. Story,.....         | Clinton, Alabama.....   | C. P. Sanders.             |
| J. I. Robinson,.....      | Stone Mountain, Ga....  | G. K. & J. L. Hamilton.    |
| Jno. R. Minor,.....       | Stone Mountain, Ga....  | “ “ “                      |
| William H. Boyd, .....    | Erin, Georgia.....      | J. G. & W. F. Westmoreland |
| A. J. Fuller,.....        | Colaparchee, Ga.....    | L. H. Jordan.              |
| G. M. Crawford, .....     | Jonesboro, Georgia....  | C. W. Smith.               |
| Samuel H. Freeman,.....   | Chinkapin Grove, Ga.... | —————                      |
| William S. Zellars, ..... | Palmetto, Georgia.....  | S. Z. Tatum.               |
| Abbott M. McWhorter,...   | Villa Rica, Georgia.... | J. T. Slaughter.           |
| Roland Mitchell,.....     | Villa Rica, Georgia.... | J. T. Slaughter.           |
| J. M. Boring, .....       | Atlanta, Georgia.....   | Jesse Boring.              |
| E. Hillyer, M. D.,.....   | Atlanta, Georgia.....   | Jefferson Medical College. |
| James M. Morris,.....     | Atlanta, Georgia.....   | J. F. Alexander.           |

| <i>Names.</i>          | <i>Residence.</i>     | <i>Preceptors.</i>         |
|------------------------|-----------------------|----------------------------|
| J. T. McKey,           | Griffin, Georgia      | H. W. Brown.               |
| B. P. White,           | Spring Garden, Ga.    | W. S. Acker.               |
| Thos. A. Boddie, M.D., | LaGrange, Georgia     | Medical College of Ga.     |
| W. A. Woodbury,        | Atlanta, Georgia      | Hayden Coe.                |
| William A. Spier,      | Louisville, Georgia   | R. K. Dickson.             |
| M. L. Pool,            | Hightower, Georgia    | W. R. Brantley.            |
| C. C. Lloyd,           | Wetumpka, Ala.        | T. W. & E. Mason.          |
| W. L. Starnes,         | Salt Spring, Ga.      | R. A. Johnson.             |
| N. G. B. Henderson,    | Tumbling Shoals, S.C. | J. H. Ware.                |
| William H. Philpot,    | Auburn, Alabama       | J. J. Mason.               |
| John E. Summerford,    | Society Hill, Ala.    | J. A. Bolin.               |
| A. Willingham,         | Cedar Town, Ga.       | H. Witcher.                |
| M. A. Leak,            | Cartersville, Ga.     | W. W. Leak.                |
| Thomas A. Darnall,     | Atlanta, Georgia      | T. M. Darnall.             |
| I. B. Fuller,          | Opelika, Alabama      | J. W. Jones.               |
| James S. Riley,        | Tumbling Shoals, S.C. | Jas. H. Ware.              |
| I. A. Thomas,          | Valley Store, Ga.     | W. W. Atkinson.            |
| J. C. Dorsey,          | Alpine, Georgia       | W. F. Shelton.             |
| Neil Gillis,           | Jamestown, Ga.        | S. C. Hitchcock.           |
| Stephen D. Wheat,      | Campbellton, Ga.      | Thos. C. Glover.           |
| W. A. Thomson,         | Tuscaloosa, Ala.      | C. P. Sanders.             |
| G. L. Johnson,         | Palmetto, Georgia     | J. S. Weatherly.           |
| J. M. Williams,        | Ringgold, Georgia     | Clements & Russell.        |
| William A. Shelby,     | Atlanta, Georgia      | Cary Lesueur.              |
| George W. Powell,      | Carrollton, Georgia   | William Johnson.           |
| Robert A. Johnson,     | Conyers, Georgia      | —————                      |
| George W. Pinkston,    | Jones' Mills, Ga.     | John B. Chatfield.         |
| F. M. Brantley, M.D.,  | Rockey Mount, Ga.     | Med. College of Georgia.   |
| D. B. Head,            | Rowenville, Ga.       | W. P. Parker.              |
| John N. Warwick,       | Dalton, Georgia       | J. G. & W. F. Westmoreland |
| Thomas A. Means,       | Oxford, Georgia       | A. Means.                  |
| N. H. Boring,          | Atlanta, Georgia      | Jesse Boring.              |
| L. C. Jones,           | Atlanta, Georgia      | J. W. Jones.               |
| S. C. White,           | Villa Rica, Georgia   | Jno. T. Slaughter.         |
| Moses Worthington,     | Eufaula, Alabama      | Thornton & Baker.          |
| Thomas Moore,          | Augusta, Georgia      | L. A. Dugas.               |
| Levi F. Duckett,       | Huntington, S. C.     | James H. Dillard.          |
| William H. Blalock,    | Fayetteville, Georgia | B. O. Jones.               |
| P. M. Tidwell, M. D.,  | Fairburn, Georgia     | Atlanta Med. College.      |
| James L. Bryan,        | Marshallville, Ga.    | Wm. Hafer.                 |
| John B. Douglas,       | Jones' Mills, Ga.     | John B. Chatfield.         |



| <i>Names.</i>               | <i>Residence.</i>       | <i>Preceptors.</i>         |
|-----------------------------|-------------------------|----------------------------|
| Irby H. Harrison,.....      | Oxford, Georgia.....    | G. Harrison.               |
| B. F. Holsenbake, .....     | Berzelia, Georgia.....  | John McTier.               |
| W. L. C. Hunnicutt, ....    | Saluda, Georgia.....    | J. P. Hunnicutt.           |
| A. J. Shaffer,.....         | Lawrenceville, Ga.....  | Wm. J. Russell.            |
| T. C. Brunson,.....         | Clarkesville, Tenn..... | E. R. Dabney.              |
| Vanlier Jackson,.....       | Palmyra, Tennessee....  | J. H. Marable.             |
| B. M. Thompson,.....        | Danielsville, Ga.....   | J. N. Culbertson.          |
| John A. Griffith,.....      | Adairsville, Ga.....    | S. L. & J. L. Hamilton.    |
| H. M. Kean,.....            | Atlanta, Georgia.....   | E. J. Roach.               |
| William F. Beckett,.....    | Pinckneyville, Ala....  | M. G. Slaughter.           |
| A. C. Jones,.....           | Bowden, Georgia.....    | T. M. Darnall.             |
| I. J. M. Goss, M. D. ....   | Mulberry, Georgia....   | Medical College of Ga.     |
| James B. Mangum,.....       | Atlanta, Georgia.....   | Burnsides & Smith.         |
| Hayden Coe, M. D.,.....     | Atlanta, Georgia.....   | University of New York.    |
| David Griffin,.....         | Rough & Ready, Ga....   | E. Griffin.                |
| S. G. Riley,.....           | Atlanta, Georgia.....   | J. G. & W. F. Westmoreland |
| John J. Walton,.....        | Palmetto, Georgia.....  | S. Z. Tatum.               |
| James R. Dickson,.....      | Griffin, Georgia.....   | E. F. Knott.               |
| John Venable.....           | Jefferson, Georgia..... | J. M. Eskridge.            |
| A. S. Whitaker,.....        | Atlanta, Georgia.....   | J. G. & W. F. Westmoreland |
| John T. House,.....         | Darlington C. H., S. C. | J. Murphrey.               |
| J. L. Barge,.....           | Sandtown, Georgia....   | L. H. Cochrau.             |
| Thomas F. Segler,.....      | Society Hill, Ala.....  | —————                      |
| S. Malone,.....             | Fairburn, Georgia....   | —————                      |
| V. H. Taliaferro, M. D.,... | Palmetto, Georgia....   | University of N. York.     |
| Jesse Yon,.....             | Ochese, Florida.....    | L. J. Lewis.               |
| Ralph B. Badger,.....       | Atlanta, Georgia.....   | T. M. Darnall.             |
| R. T. Pulliam, M. D.,.....  | Atlanta, Georgia.....   | Med. Col. of Virginia.     |
| N. F. Powers,.....          | Palmetto, Georgia....   | Sam'l Glenn.               |
| E. N. Benton,.....          | Hogansville, Ga.....    | John Clopton.              |
| Henry Gaither, M. D.,....   | Oxford, Georgia.        |                            |

## Graduates.

---

| <i>Names.</i>            | <i>Residence.</i> | <i>Subject of Thesis.</i>         |
|--------------------------|-------------------|-----------------------------------|
| Wm. H. Philpot,.....     | Ala.....          | Pertussis.                        |
| J. J. Montgomery,.....   | Georgia.....      | Phthisis Pulmonalis.              |
| R. C. Mayson,.....       | South Carolina... | Disorders of Menstruation.        |
| Wm. A. Speir,.....       | Georgia .....     | Chloroform—its use and abuse.     |
| T. C. Brunson,.....      | Tennessee .....   | Signs of Pregnancy.               |
| William H. Boyd,.....    | Georgia .....     | Inflammation.                     |
| B. M. Thompson,.....     | ".....            | Menstruation.                     |
| Jesse Yon, .....         | Florida.....      | Pneumonia.                        |
| Thos. A. Means, . . . .  | Georgia .....     | Phthisis Pulmonalis.              |
| J. A. Griffith,.....     | ".....            | Fevers of Chattooga Co., Ga.      |
| C. C. Lloyd,.....        | Alabama.....      | Acute Inflammation.               |
| Vanlier Jackson,.....    | Tennessee .....   | Gunshot Wounds.                   |
| L. F. Duckett,.....      | S. Carolina.....  | Sanguinary Canadeusis.            |
| Moses Worthington,....   | Alabama.....      | Typhoid Fever.                    |
| W. A. Thomson,.....      | ".....            | Signs of pregnancy.               |
| H. J. Sanders,.....      | ".....            | Diagnosis.                        |
| Neil Gillis,.....        | Georgia .....     | Secale Cornutum—its uses, &c.     |
| J. J. Boring,.....       | ".....            | Signs of Pregnancy.               |
| James S. Riley,.....     | South Carolina... | Circumstances embarrassing to     |
| Jno. T. House,.....      | "....."           | Periostitis. [the Med. prof.      |
| J. C. Respass,.....      | Georgia .....     | Atelectasis Pulmonium.            |
| B. F. Holsenbake,.....   | ".....            | Delirium Tremens.                 |
| S. G. Benson,.....       | ".....            | Uterine Hemorrhage.               |
| Augustus Willingham,.... | ".....            | Enteric Fever.                    |
| G. W. Pinkston,.....     | ".....            | Scarlet Fever.                    |
| W. F. Beckett,.....      | Alabama.....      | Scarlet Fever.                    |
| A. C. Jones,.....        | Georgia.....      | Retention of the Placenta.        |
| James B. Mangum,.....    | ".....            | Physiology of the Eye.            |
| Robert A. Johnson,.....  | ".....            | Acute Dysentery.                  |
| William S. Zellars,..... | ".....            | Colo-rectitis.                    |
| Eli Griffin,.....        | ".....            | Gastritis.                        |
| A. H. Shi,.....          | ".....            | Typhoid Fever.                    |
| A. J. Shaffer,.....      | ".....            | Typhoid Fever.                    |
| W. L. Starnes,.....      | ".....            | Conduct of a Labor.               |
| N. F. Powers,.....       | ".....            | Inflammation, its causes, theory, |
| John R. Douglas,.....    | ".....            | Pulmonitis. [&c                   |
| I. H. Harrison, . . . .  | ".....            | Yellow Fever.                     |

| <i>Names.</i>            | <i>Residence.</i> | <i>Subject of Thesis.</i>       |
|--------------------------|-------------------|---------------------------------|
| William H. Blalock,..... | Georgia.....      | Puerperal Fever.                |
| William A. Shelby,.....  | ".....            | The Lancet and its substitutes. |
| James B. Dickson,.....   | ".....            | Remittent Fever.                |

The following gentlemen were admitted *ad eundem gradum* in this Institution :

THOS. A. BODDIE, M. D., HENRY GAITHER, M. D., I. J. M. GOSS, M. D., EBEN HILLYER, M. D., V. H. TALLIAFERRO, M. D., HAYDEN COE, M. D.

The Honorary Degree was conferred on J. J. CALDWELL, of Zebulon, Georgia.



A T L A N T A  
Medical and Surgical Journal.

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VOL. II.]

SEPTEMBER, 1856.

[No. 1.

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ORIGINAL COMMUNICATIONS.

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ARTICLE I.

*Dry Gangrene.* By CHARLES WILLIAM ASHBY, M. D., Alexandria, Virginia.

This is quite a rare disease, and therefore, it may be that a report of a case which has recently occurred in my practice, may not be without some interest to the profession.

Sometime in April I was called to see Mrs. Hall, and found her suffering, occasionally, intense pain in one toe, and at times, also, in the foot. I was so forcibly struck with the entire insensibility of the foot to the touch, its intense cadaveric coldness and diffused bluish-redness or ecchymotic appearance, that I felt sure it was a serious case of disease, and expressed the opinion that it would probably result in Gangrene, such as is so accurately described by Pott and others. It had been suggested that it was a case of frost-bite, but the old lady protested she had not been exposed in the slightest degree. She had been suffering about four weeks when I first saw her; she was taken with pain in the night, and discovered the coldness, insensibility and redness the next morning; she was 67 years old. I put the old lady on a good generous diet, with the free use of opium and mild local applications. She continued this treatment for several weeks; and although the pain was greatly relieved by the opium, there was no improvement in the appearance or character of the disease.

As I could not conscientiously hold out much hope as to her recovery, she, for a time, went into the hands of a quack, who decided, very positively, that it was a frost-bite, and promised a speedy cure.

As I was unwilling to lose sight of the case, I requested Jno. Danforth, a student of mine, to call and see her occasionally, and watch the progress of the disease. It gradually increased, probably aggravated by the harsh treatment, and in about two weeks a small black spot appeared on the second toe, which confirmed the original diagnosis.

She now again became my patient, and from this time (now about two months from the first appearance of the disease) I witnessed, with painful anxiety, its rapid progress: first one toe becoming black and dry, and then another, until nearly the entire foot was implicated.

I had attended this old lady some six months previously for a hemorrhage of the lungs, but her general health now seemed to be very good; she had no cough, nor indeed any constitutional symptom up to this time; she was very poor, and had undergone a great deal of trouble and hardship in life.

Notwithstanding the opinions of the older surgeons to the contrary, Sir Astley Cooper among the number, after a free and full consultation of the entire faculty of Alexandria, it was unanimously agreed that amputation above the knee held out the only possible hope of recovery. This decision was based upon the more recent report of some successful cases, where amputation, *high up the thigh*, was practised.

There was little or no discharge or fœtid odor, and the mummy-like appearance was very striking. There was no well marked line of separation, but on the day of the operation, for the first time, I observed red lines passing up the leg: this I regarded as most unfavorable.

After a fair representation of the almost hopelessness of her case, she was anxious for the operation. It was done in the usual way, in the presence of Drs. Fairfax, Murphy, Lewis, French, Brown, Chancellor and Gregory.

Under the influence of chloroform she suffered not at all; and there was no apparent shock to the system, the pulse being only 80 in the minute, after she was put to bed; very little blood was lost, there being no jet from the femoral artery.

The tenaculum in the mouth of the cut femoral artery at once arrested my attention to the grating sound of ossific deposit.

At the first dressing, on the third day, unmistakable indications were present that the disease had attacked the stump.

Although she was apparently quite comfortable, enjoyed her food, and was very cheerful up to the 10th day, she had a red glazed and dry tongue nearly the whole time. At this period, she was taken with intense pain in the other foot, and the deadness, coldness and peculiar redness which soon appeared, satisfied her that it was the same disease in that limb also. She now gave up all hope of recovery, and sank rapidly on 13th day after the operation.

The examination of the artery, after the operation, exhibited *its entire closure* by a semi-calcarious deposit, commencing at the popliteal region. At the post mortem, conducted by my intelligent young friend, Dr. Wm. Gregory, the femoral artery was found very much contracted about two inches above the operation, had various patches of ossific deposit, and a recent clot up to the profunda artery. The profunda was inordinately enlarged, doubtless from its having conducted for some time past, the almost entire circulation.

This brief and imperfect report is given merely that the profession may judge as to the propriety of operating in such cases.

The publication of our unfortunate cases, and even our admitted errors in practice, may serve as beacons for others, and thus prove most valuable.

After a review of all the circumstances, I do not hesitate to say that I would perform the same operation again, as I believe that amputation *high up the thigh* affords the only rational hope of recovery.

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## ARTICLE II.

*Case of Catalepsy, with Remarks.* By H. W. CAFFEY, M. D.,  
Collirene, Alabama.

In the course of my practice last year, I met with an interesting and unique case; one which occasioned a great deal of perplexity of mind, as to the proper method of treatment

adapted to it, and I am still uncertain whether the measures then instituted were correct, and with the hope of eliciting some light, which may contribute towards dispelling the incertitude by which it was environed, I am induced to forward an account of it. If you deem its merits sufficient to be entitled to a publication, it is at your disposal.

I was sent for in great haste on the 14th of May, 1855, to visit Amanda, a mulatto servant girl, aet. circ. annos, 22, melancholic temperament, and of good general health. On interrogating the messenger, he replied that it was thought she had been bitten by a snake. I arrived at the spot where she lay, about 12 o'clock, M., and on inquiry into the case, was informed that she complained of no indisposition in the morning, was apparently as well as usual, and ate heartily of breakfast; while working in the field about 10 o'clock, A. M., she suddenly fell prostrate on her back; after remaining quiescent a few minutes, she uttered the exclamation, "glory! glory!" and then remained mute and entirely motionless. Some strong linament, composed of camphor and chloroform, had been poured over her face, a portion of which ran into her eyes, but no sensation of pain was evinced; her name had been called loudly in her ears, with an equally futile effect. On examination, I found the pulse regular and natural, about 75 beats per minute; respiration free and gentle as that of a slumbering infant; skin soft and somewhat moist; slight and regular winking, or rather quivering of the eyelids, and general rigidity of the muscular system, (voluntary,) the limbs remaining passively in any position in which they were placed. Her general appearance was that of one in a deep and tranquil slumber. Having just commenced the practice of medicine, and being inexperienced, I did not at once recognise that I had to contend with an affection which had puzzled older and wiser heads than mine. I was sorely perplexed; the case could not be ranked under the head of convulsive diseases; the symptoms were not those of hysteria, epilepsy, or apoplexy: there was no sighing, no violent muscular movements, no stertor; it resembled more closely "coup de soleil," and the attending circumstances, viz: that she was working in the sun, and the weather very warm, would seem in some degree to warrant such a diagnosis, but here the resemblance ceased,



and the other symptoms were so widely divergent, as utterly to forbid the idea. Being unable to make out a satisfactory diagnosis, I determined to resort to venesection, to meet the indication of rigidity of the muscular system, and probably some congestive action; she was therefore bled to the amount of about xiv. 3, and afterwards an emetic was administered without much effect—then gave a cathartic, composed of rhei. et sub. mur. merc. As I was returning home, the idea occurred to my mind, that it must be a case of Catalepsy, from my recollection of its description, and on consulting my books, the impression was confirmed. The symptoms enumerated under that head are as follows: "A sudden suspension of thought, of sensibility and voluntary motion; the patient remaining, during the paroxysm, in the position which she (for it is almost always a female) happened to be at the instant of the attack, or in the position in which she may be placed during its continuance; and all this without any notable affection of the functions of organic life."

15th. Visited her at 10 o'clock, A. M., and found her in much the same condition; pulse somewhat increased in frequency, say 85 to 90 per minute; the purgative given the previous day had produced no motion, nor had the urine been evacuated since I left her. The trance, if I may so designate it, seemed so profound, that I determined to make a trial, to test its reality. Some stinging nettles were procured, and rubbed on her legs, arms and bosom, so as to produce large elevations on the surface, similar to those witnessed in urticaria, but this failed to induce the slightest evidence of pain; she was tickled, pinched, and finally a hot iron was applied, so as to blister, but none of these means resulted in motion, or elicited the faintest token that she was conscious of their use; her pulse was carefully examined during their application, and continued to beat calmly and regularly as before. These measures by some, may be considered harsh and unnecessarily severe, but the circumstances implicated will, I apprehend, extenuate them; her master informed me that she was a "malingeringer;" and was in the habit of endeavoring to deceive him, and seemed to apprehend that she was playing a studied part, and in order to satisfy him, as well as solve the doubts in my own mind, they were instituted.

I now ordered an enema of a stimulating and antispasmodic character, which brought away a stool of a copious nature, and healthy appearance; placed a blister on the lumbar region, and ordered a teaspoonful of the following every hour: *R.* *G. foetid.*, *g. aloes*, *pul. rhei.*, *aa*  $\mathfrak{g}\text{j.}$ ; *spts. lav. comp.*,  $\mathfrak{z}\text{j.}$ ; *et aquæ*,  $\mathfrak{z}\text{ij.}$ ; *misce. enema* to be given in the afternoon, if the mixture does not purge.

16th. Some change in the condition of the patient; pulse 100, and some fulness; less color, and more mobility of the muscular system; the medicine given had not acted on the bowels, so the enema was administered, but brought away no fecal discharge. Blister drew well—ordered it to be transferred to the lower cervical region; continue mixture as before, and enema, if it does not purge.

17th. Much improved; consciousness restored, along with muscular action and sensation; makes complaint of pain in the region of the stomach, and much weakness; pulse 85, and natural in volume. Questioned her in regard to being conscious of her condition while in the trance, and whether she experienced pain from any of the means adopted, to test the completeness of the anæsthesia in her case, and she replied negatively. *R.* *Pil.*, *hydrarg.*, *ex. coloc.*, *c. et pulv. rhei. iij.*, and a teaspoonful of the following mixture every hour: *R.* *Spts. lav. c.*,  $\mathfrak{z}\text{ij.}$ , *sulph. morph. gr. s.s. et aquæ*,  $\mathfrak{z}\text{jss. misce.}$

18th. Relapsed into cataleptic state; pulse 90, and somewhat full; not so much rigidity as in the first attack; respiration irregular.

19th. Recovered, and condition much the same as on the 17th.

20th. Did not visit her, but there was a relapse as on the 18th.

21st. Restored to consciousness; pulse 75 and good; action on bowels of a healthy character; complains of hunger.

It will be unnecessary to give a minute detail of the relapses, farther treatment, &c., of this singular case, as it would extend this article far beyond its intended limits: suffice it to say, that relapses continued to take place, from time to time, and some of them lasted as much as seven days, during which time the patient took no nourishment, except an occasional

spoonful of water or gruel, which was poured with difficulty down the throat. I endeavored to vary the treatment to meet the different indications as they arose. I consulted the best and most approved authorities accessible to me, but notwithstanding my most strenuous exertions, the disease did not entirely succumb. At one time it was held in abeyance for a month, the patient improved in flesh, color, strength, &c., and I laid the flattering unction to my soul, that victory was about to perch upon my banner, but alas for the vanity of human hopes! it soon resumed, in some measure, its wonted sway. The womb was examined with a speculum, but no evidence of disease detected; and as the catamenial function was regular, and natural in quantity, I could not accuse the uterus as being the peccant organ, at least in this respect. It may be proper to remark, that the treatment consisted in counter irritations, antispasmodics, purgatives and tonics perseveringly employed. Her general health has not suffered much—appetite continued good, and she performs a good deal of labor about the house during the interims of her attacks. She is now wearing a seton in her neck; it remains to be seen whether any benefit will accrue. I would observe here, that a case presenting a good deal of similarity to the foregoing, occurred in the same community, (not under my charge,) which resisted every means instituted for some two or three years, and after becoming utterly wearied and disheartened at the result, all medical treatment was abandoned, and after awhile, the patient spontaneously recovered: this case was also in the person of a negro girl.

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### *Remarks.*

The above is a “bona fide” instance of Catalepsy, if its description in the books is to be accredited; a disease of such rare occurrence and obscure pathology, that many practitioners of sagacity and experience regarded its existence as altogether apochryphal; among these was the distinguished Cullen, who never “met with any instances of it which were not feigned,” and therefore attributed the phenomena exhibited in the so-called affection, to the consummate skill of Charlatans and designing imposters; but that it has a legitimate right to a position among the “ills which flesh is heir to,” is now so

well attested and sustained by the weight of such indubitable authority, that those who are susceptible to conviction, can no longer look upon it as an affection merely existing in the utopia of the imagination, simply because they have not witnessed it with their own eyes.

Catalepsy and Ecstasy, according to the authority of Dr. Joy, are "mere modifications of the same morbid state," and cites a case given by Sauvages, "in which the first part of the paroxysm consisted in violent declamation and gesticulation, and loud singing, the girl being quite insensible to external objects; whilst in its termination, the fit had all the characters of true Catalepsy."

"Vivid dreams or visions of an extraordinary nature occasionally occur, and are firmly impressed on the memory, so that they can be minutely detailed afterwards." This peculiarity was exemplified in the case under consideration; the girl related to me with a great deal of apparent earnestness, that during her trance, she had visited a magnificent white mansion, inhabited by the most beautiful persons she had ever seen, clothed in white habiliments; and they gave her some of the purest and sweetest water to drink she had ever tasted; that among these personages, she recognized her mistress and several fellow servants, some of whom had been dead several years. This account she reiterated repeatedly, and it seemed to have made a firm impression on her mind.

The peculiar pathological condition which gives rise to this wonderful disease, as I before asserted, is exceedingly obscure and indeterminate; "the younger Pinel has attributed the symptoms to an inflammation of the spinal marrow." But this I apprehend is eminently improbable, for where so sensitive and important a structure is laboring under inflammatory action, its effects would be more clearly and unequivocally manifested, and there would scarcely be so apparent a cessation at times, of all symptoms indicative of diseased action, an absence of all tenderness on pressure, as was exhibited in this case; notwithstanding the high authority from which it emanates, I must therefore reject this explanation. Hoffman entertained the opinion, that it arose from a congelation of the nervous fluid, from the fact, that the cases he met with, transpired during cold weather, and I presume he could offer no

more rational solution of a problem, whose mystery puzzled him; but this is evidently an erroneous hypothesis, for the one above related occurred in the summer, while the weather was very warm. The cause assigned by Dr. Joy, I regard as much more philosophical than either of the others, and will more nearly explain the various phenomena displayed, viz: "a temporary state of irritation, and congestion of the cerebro spinal axis." Whether this be the true solution of a difficult problem, time and experience, those great arbiters of human opinions, must determine.

My explanation at the time of the occurrence of the case, was different from any of the above opinions; but after events rendered it very questionable in my mind if I was not in error; however, I looked upon it in this wise: the attack occurred at a catamenial epoch, and her master informed me, that previous to this time, at each monthly period, her mind seemed to be somewhat alienated, evinced by depression of spirits, irritability, and losing its equilibrium from the slightest causes, and then a tendency to run away was developed; indeed, she had left home several times while in this condition, and wandered about like one demented, and when sent home by any of the neighbors whose houses she visited, wept bitterly. She was kindly treated by her master, and could not have acted so from abuse. My explanation ran thus: that there existed sub-acute inflammation of the uterus, and at the transpiration of each monthly flux, a disproportionate degree of congestion took place, then an abnormal degree of irritation being excited, the cerebrum sympathised, through the medium of the ganglionic system of nerves, with the afflicted organ, and exhibited that sympathy through a perturbed or perverted intellection. She is deemed somewhat fatuous at best, and the brain being the weakest point, according to physiological principles, the disease was invited or attracted to that organ. That the brain can sympathise with a disturbed viscus, to such an extent as was exhibited in this case, can be sustained by analogical reasoning. Hypochondriasis is a case strongly in point, the seat of which is undoubtedly in the stomach and bowels; yet the mind is influenced in an extraordinary degree, loses its healthful tone, and is guilty of a thousand fanciful vagaries, existing only in a diseased imagi-

nation. Irritation in the bowels of children from worms, acrid ingesta, &c., affecting the brain and spinal marrow, giving rise to convulsions, may also be cited. Irritation in the gums during teething, leading to a like result, is another instance. Many more might be advanced, were it necessary, to substantiate my position, but this is supererogatory, as I believe the fact is not denied.

I had neglected to mention that my patient has never been enciente; whether this would have any influence or not, I am unable to conjecture. As I before intimated, this hypothesis suggested itself to my mind in the inception of the case, as a rational solution of the phenomena displayed, but from the fact that the succeeding attacks came on, irrespective of the catamenial periods, I was led to doubt its correctness.

I submit the case, and my views of it, with much diffidence, with the additional observation, that as this is my primordial effort at writing an article for the consideration of my professional brethren, I trust its want of facts, and imperfections of reasoning, will be regarded with a lenient eye: these are errors to be corrected by sagacious observations and enlarged experience.

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### ARTICLE III.

*Observations upon Menstruation—its Cause, Character and Effects upon the Female Economy.* By ROBERT E. CAMPBELL, M. D., Benton, Lowndes County, Alabama.

Any remarks that I may offer upon this subject, may appear superfluous, after the numerous essays which have been published upon it, yet the surest way to come at a correct conclusion, when a mooted point is in question, is by deep thought and research, neither of which I profess to bring forward in the ensuing remarks; yet, I hope that the facts I may present, will stimulate Southern practitioners to the study of menstruation in our climate. It is indeed a subject well worthy of the attention of medical men, for the affections and ills which spring from its unnatural course, are many and various—the

greater part of them constituting the most serious maladies with which we have to contend in our ordinary routine of female practice.

The most approved definitions of *menstruation* say it is "a secretion from the female generative organs—occurring about every twenty-eight days." This is about the sum and substance of them all, and therefore it would be unnecessary for me to quote at length the various definitions of authors. There has been, also, much discussion as to the definition, but we will take the old phrase, simply protesting against the word "secretion," for it is not a "secretion." Secretion is defined to be "an organic function, which is chiefly executed in the glands, and consists in an elaboration or separation of the materials of the blood at the very extremities of the arterial system," &c. Now, how can menstruation be called a *secretion*? There is no *elaboration* or *separation* of the materials of the blood; on the contrary, the blood which is discharged during this period, is almost pure; and it "exudes in the same manner from the internal parieties of the uterus, as in hemorrhages from exhalation"—(Condie.) He also says that its indisposition to coagulate results from its admixture with the acid discharges of the vagina. From post mortem examinations of females who have died while the menstrual discharge was on them, it has been proven by the highest authority, that the blood-vessels of the uterus are much distended, and that by pressing them, drops of pure blood can be driven out into the uterine cavity. Therefore, I contend that it is not a *secretion*, but a *function*.

It would be an utter waste of time and space to go into a full detail of menstruation, its course, &c., therefore I shall content myself with hurriedly glancing at a few prominent points observable in women who are "regular," and also a few who are "irregular."

First, the period at which the function occurs: this, most authors contend varies in different climates. Now, admitting that climate has some effect upon it, we must, after a careful investigation, concede less influence to it, and more to the habits of life, the society, and the state of civilization in which destiny has thrown the female. In our climate, the females of the higher classes of society seldom or ever menstruate before the 14th or 15th year; and cases are not rare where they are

destitute of it to the 19th or 20th. Our slaves scarcely ever menstruate before the 15th year; at least, I found such to be the case in the investigations I have made, and I think I can safely put down their natural menstrual age at 15, (too early venereal indulgence of course excepted,) and instances of their not menstruating until a much later period, are quite as frequent as in the "fairer sex." I hope I will not be understood as trying to bring forward the hypothesis, that climate has *no effect* in producing or retarding the menstrual flux: far from it; my idea is, as I said before, that too much stress is laid upon the influence of climate over the function. Therefore, I shall contend that, of our population, the Anglo Saxon menstruate latest, (say 16 years of age,) the African a little sooner, (about 15,) and the mulatto from 15 to 17, and among the remnant of our Indian tribes, (a race famed for virtue,) in this climate, menstruation is rare before the 16th or 17th year. This, to some, may appear a strange doctrine, yet, of the facts stated above, I can assert that they are the result of a good deal of research, which I have carried on for the last four years upon this subject. I believe that if our white females were let loose, unrestrained, as it were, to gratify their animal passions, as are the greater part of our negroes, especially field hands, that they would menstruate equally early with negroes; yet in the present happy state of society, they do not, *nor do female slaves kept as house servants* (*ceteris paribus*) *come under this function as soon as field hands*. The only reason I can assign for this, is that the former are less liable to give vent to their venereal passions at so early an age as the latter. As far as my observations go, negroes, as a general thing, *discharge less* at each menstrual period than whites: this is probably owing to the latter leading more indolent lives, and their diet being richer and more plentiful. Whites are also more subject to derangements of this important function; therefore, diseases of the uterus are far more frequent than in negroes—the most common affection among blacks being *prolapsus uteri*.

*Suppressio mensium* is far more common in this climate than is generally imagined. I have been credibly informed by a medical gentleman of this State, who has done a large female practice for 15 or 20 years, that it is far more frequent



than any other form of disease to which women are liable. He attributes it, and I think with good reason, to the sudden changes of temperature, and that especially during the fall and winter months, not to enumerate the cases of it which are produced by fashionable folly. Negroes, on account, perhaps, of exposure, are more frequently afflicted with it.

*Vicarious Menstruation.*—It is a well authenticated fact, that when the discharge does not occur *per naturalis vias*, that it is apt to seek some other outlet. The system being in a state of plethora, nature designs that it should be relieved, and if any obstruction, whether congenital or otherwise, prevent the evacuation of the overloaded vessels, it takes place from some unusual spot. I know of a case, a negro girl, in a neighboring county, who is now about 17 years of age, of a rather anæmic constitution, in whom menstruation proper has never occurred. Her first "show" was about 12 months ago, when a substance of a glairy mucous character was evacuated to the amount of about 3 ounces. She then missed several "periods" without any discharge, and but little, if any, inconvenience. When the time approached, about four months after the first, she was seized with slight hemorrhage from the nose upon the least exertion: this lasted two days, and on the third there was a very profuse bleeding, (to the amount of 20 ounces, I am informed.) There was a female patient admitted to the wards of the Savannah City Hospital, last summer, who was afflicted with a large indolent ulcer of a syphilitic character, upon the anterior part of the left leg, about midway down the tibia. I was, at that time, house student, and observed the case closely; and I observed that at the return of each menstrual period, the sore became turgid with blood, and there was a continual oozing of blood and pus from it, lasting from two to four days, when it would gradually subside. She also told me that she had not had her menses in several months, and that since their suppression, the sore had never failed to ooze blood and matter at the proper "period." Almost every one who has paid any attention to this interesting subject, can detail cases very similar, and in any or all of our medical works, we find various cases detailed of hemorrhages taking place from various parts of the body to supply the accidental deficiency of nature; thus, we have instances of hemorrhages

from the eyes, rectum, nose, gums, and even from the cutaneous surface.

*Theory of Menstruation.*—Innumerable theories have been established to account for this function. Every author has brought forward one of his own, and now the medical annals teem with them, the student is often puzzled to select from among the number the most plausible one, and is consequently left in doubt as to a belief upon the subject. The faculty are divided, and scarcely any two of them arrive at the same conclusion. How important is it that we should discuss, through the pages of our Southern periodicals, this important point; for by that means, we may become more conversant with it, and from the collected experience of our brethren, we may possibly glean some facts which will clear up much of the mystery which now envelopes it.

We know that so soon as menstruation is well established, the female is, as a general thing, capable of procreation. There are some instances of women becoming *enciente* before the age of puberty, yet we must look upon all such cases as anomalies, and in no manner affecting the general rule. At this period, the whole corporeal and mental being undergoes a marked change; the limbs become rounded, and assume that beautiful symmetry so characteristic of the well developed female; girlish sports and pastimes are laid aside for more matronly pursuits, and there is a pensive countenance never observed in them before. But, to enumerate all of these changes, would be useless, for every one is conversant with them. I contend that all women who are well formed and healthy, are capable of becoming impregnated after the first menstrual period. Nature, it seems, has made a wide provision in the female economy whereby, after menstruation is established, she generates more blood than is necessary for the wants of her own system. This superabundance of blood is designed for the support of the product of conception. This seems to be clearly proved by the fact, that *when conception takes place the menstrual drain ceases*, and the blood, instead of becoming a source of irritation, and being thrown off as formerly, now goes to the support of the foetus, as nature designed. When conception does not take place, the accumulation is each month (or about every 28 days) thrown off. It

exudes from the internal parieties of the uterus, and is pure blood mixed with the acid secretions of the uterus and vagina. The foregoing is a synopsis of the theory established, if I mistake not, by Simon, and when we analyze it carefully, it seems far the most plausible one.

For want of time and space, I am compelled, for the present, to close this article. Will some of our medical brethren not give us their opinions upon this absorbing subject, through the pages of the Journal? It is probable that we might glean *some new* facts upon it, and most assuredly it will *detract* nothing from our present knowledge.

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#### ARTICLE IV.

*Report of a Case of Gun-shot Wound, with observations.* By  
WALTER SOMERVILLE, M. D., Culpepper County, Virginia.

“Many a limb is sacrificed by the catling and saw that might be saved by the use of a more sober and cautious judgment.”—*Meigs.*

The *vis medicatrix naturæ* appears wonderful to us, in many of those diseases which come within the province of the physician, but still more so in many of those injuries which belong to the department of the surgeon.

The eloquent writer quoted above, remarks, in connection with this subject, “doubtless, in the history of surgery, many cases are to be found of operations performed without necessity.” Of the truth of this remark, no one possessing any experience in, or any acquaintance with the treatment of surgical cases, can doubt; yet we do meet with cases in which it becomes a very important and responsible duty to determine whether or not amputation ought to be resorted to. Of such a character was the case which I now propose to report, and the result of which is calculated to encourage us in the pursuit of that course in which I think we need encouragement, namely, to estimate more highly, and trust more than we have done, to this important principle, the *vis medicatrix naturæ*, or as it would be more appropriately expressed, the *vis medicatrix dei*.

On the 31st of May, of the present year, I was called to visit a colored boy, about 18 years of age, belonging to Mr. W. W., of this county, who, in attempting to raise a gun from the corner of a fence, on the side opposite to that on which he was, the cock, coming in contact with a rail, was drawn back, and falling upon the tube, the gun discharged, and the muzzle being held by the right hand, the load consisting of large squirrel shot, entered the hand near the centre of its palm, and passing obliquely upwards and outwards, made its exit through the upper and back part of the hand and the lower part of the wrist joint. By recollecting the manner in which we naturally take hold of the head of a walking cane for the purpose of using it, applying the palm of the hand to the head of the cane, we shall readily comprehend the course of the wound. However, to be more accurate, it entered rather above the centre of the palm, and passed out between the metacarpal bones of the index and ring fingers and that part of the wrist joint contiguous, fracturing the upper part of the metacarpal bone of the middle finger and several of the bones of the wrist.\*

By probing the wound with my ring finger, I soon discovered, as I had supposed, that the whole of the load, shot and wadding, had passed out.

The point of difficulty and responsibility in this case, was in deciding whether or not amputation should be resorted to. The advice of most authors, is to amputate in gun-shot wounds seriously affecting the joint, yet bearing in mind the progress of surgical science, and influenced somewhat by my own experience, I decided against this resort. This was a case, however, in which the life of a fellow creature being concerned, I considered consultation desirable, and obtained the advice of my very judicious and experienced friend, Dr. Holladay, of Orange county. He concurred with me, and the result is, that after the lapse of ——— since the injury was received, the patient is now entirely free from danger; the wound has almost entirely healed, and the patient will regain almost perfect use of the hand and fingers. The treatment adopted was simple.

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\* Six pieces of bone, mostly about the size of that part of the nail which appears on the little finger, have been discharged by the sloughing and suppurating process.

Cold water dressings frequently renewed during the first 36 or 48 hours; fluid opium to allay nervous irritation, and procure sleep; low diet, with purgatives during the period of fever; and during the sloughing stages, poultices, especially the fermenting poultice, with olive oil or lard incorporated, and freely applied to the surface, gently washing morning and evening with mild soap and water, and a dilute solution of chloride of soda after each ablution, embraced the whole of the treatment, to which should have been added an elevated position and rest of the part.

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*Gaseous Colic.* By W. T. GRANT, M. D., of Wrightsboro', Columbia county, Georgia.

I was called recently, in haste, to see a negro man 40 years of age, laboring under, as I was told, "cramp colic." On my arrival, I perceived at once, that the colic was gaseous. The history of the case, prior to my seeing it, was somewhat as follows: He had eaten a large quantity—perhaps a quart—of peas, which were half cooked, for breakfast, on the morning of the day of his sickness, and went immediately out into the field to work. About 10 o'clock, he complained to his overseer, that he was very sick, who told him to go home; which he did at once, the overseer going with him. The overseer tells me that when they reached the house, the negro was beginning to swell, and he gave him some camphor, which caused him to vomit, after which, he sank down upon the ground, losing, apparently, all his strength. The overseer then hurried off after a physician, and I reached the farm by eleven o'clock, or a little after. I found the negro enormously distended in the upper part of his body, reaching as low down as the umbilicus. The interspaces between the ribs were protruded, and he was as tight as a drum. He had no radial pulse, nor any other that I could perceive; respiration very feeble, and very slow; extremities cold. The heart and lungs were almost entirely impeded in the performance of their functions—so much, indeed, that I think he would have died in a short time if relief had not been afforded.

The indication, and the only indication, was to get rid of the gas. I noticed that, whenever he vomited, it brought up some of the gas. I administered an emetic, which acted promptly, and brought up a considerable quantity, but all that was brought up by this means, was so little, in comparison with the quantity that was in him, that it produced no relief. I thought, then, that by distributing the gas through his bowels, it would relieve his heart and lungs until I could adopt such means as was calculated to rid him of the gas entirely. I accordingly administered a cathartic; but that was vomited up immediately. It then occurred to me to use the *pulverized charcoal*, (*carbo ligni*,) and I had some of the coals from the fireplace pulverized, and given him, which soon indicated a favorable change, and in two hours, he was so much relieved that I considered him out of danger. Soon after its administration, the pulse began to rise, and in a short time, was comparatively a good pulse. After directing that one or two doses of the charcoal should be given him during the evening, to insure an entire absorption of the gas, and at night, a good dose of castor oil, I left him entirely free from all danger. The next day he was well, with the exception of the necessary soreness of the abdomen and chest, and some debility. I presume that the *modus operandi* of the charcoal was absorption of the gas.

I should have mentioned, that when the overseer gave him the camphor and caused him to vomit, he brought up a quantity of peas entirely undigested, and swollen as large as the end of a man's thumb.

## SELECTIONS.

*Congenital Hydrocephalus, with remarks.* BY WM. HALES HINGSTON, M.D., L.R.C.S.E., &c.

Hydrocephalus, like accumulations of water in any other part or organ, is a disease of debility, proceeding from a relaxed condition of the secretions of a part; from inactivity of its absorbents, or, as more frequently happens, from both; the *cause* of the disease being rarely manifest.

Accumulations of fluid are met with in various parts within the cranium: "inter integumenta ipsa externa; inter haec et cranium; inter cranium et cerebri membranas; inter membranas ipsas; harumque duplicaturas; inter has et cerebrum; inter cerebri plicas; in cavitatibus ipsis."\* The fluid, once secreted in any part, spreads with little resistance to another. If the disease occur in infancy, (and infants are most generally the subjects of it,) the bones of the cranium, not yet united by their bony sutures, yield to the internal pressure. Somewhat later in childhood, and while the *fontanelles* are yet unclosed, they, by a preternatural fullness,† or bulging outwards, warn us of the mischief going on within the skull.

Hydrocephalus is occasionally congenital, sometimes rendering the head so large, as greatly to impede, and add to the danger of, delivery.

The appearances, which these congenital malformations present, are not uniform. In the majority of cases, the whole head enlarges gradually; but, in not a few, we may observe protrusion of one side only; while in a still smaller number, an egg or pear shaped tumor is visible beneath a *fontanelle* or an attenuated parietal or other cranial bone.

"The mode of origin or pathogenesis of congenital hydrocephalus differs most probably in no essential particular from that of the chronic hydrocephalus which commences in the extra uterine periods of life.

\* \* \* \* The general arrangement of the skull of the foetus, and the manner in which the cerebrum itself is developed, are both highly favorable to an excessive accumulation of serum. And I believe that the really essential part of congenital hydrocephalus, that which arrests the development of the brain, is the affection of the epididyma; that in proportion to the degree to which the hydrocephalus has advanced, and according to the period of foetal life at which it commenced, it does, in various manners and to different extent, arrest the development of the brain, and occasion monstrosity of it; and so far contains the ground of its alliance with hemicephalus, hydrancephalocele, singleness of the cerebrum (cyclopia) &c."‡

\* Van Swieten, "*Commentaria*."

† I speak generally, and not in ignorance of the fact, that in some cases of hydrocephalus, the *fontanelles* are depressed.

‡ Rokitsansky's *Pathological Anatomy*, Vol. III, p. 276, Amer. ed.

The substance of the brain in this affection, resembles the *ramollissement* of French pathologists. Sometimes the whole organ, sometimes the portion in immediate contact with the water undergo softening.

So much then, for general remarks, by way of a preface to a case which came under my observation some time ago.

Mrs. W., a stout healthy woman, *æt* 30, sent for me on the morning of the 4th September last. I was told that she was suffering from violent labor pains, which threatened abortion—that a midwife had been in attendance during the whole night, but that no progress had been made. I found the woman on my arrival on her back, with knees in a flexed position, countenance expressive of great suffering, eyes suffused and red, skin hot, pulse 115, hard and wiry.

The midwife\* was on her knees in the patient's bed, both hands beneath the counterpane, lips compressed, tugging away during a "pain(?) most energetically, and perspiring as copiously as if the fee would be regulated by the visible amount of cutaneous exhalation. On making a vaginal examination, I found the *labiæ*, from the unwarrantable handling they had received, very much tumified, hot and painful; the *os uteri* not dilated, but tilted forwards behind—I might almost say, *above* the symphysis of the pubis—so high, indeed, that with difficulty could the tip of the finger be brought near its edge. A large tumor—tender on pressure—occupied the hypogastric region. Recognising this as a distended bladder, I introduced the catheter, and drew off fully two quarts of dark offensive urine, with sudden and complete relief. The rectum, also in a loaded state, was emptied by castor oil. During the three following days the catheter required to be used twice daily, and at the end of that period the retroversion was reduced, and the uterus ascended to the superior strait.

I saw nothing more of my patient until two o'clock on the morning of the 13th March. She was then in labor; the *liquor amnii* had escaped the day before. The pains were severe, and at short intervals. On examination, the breech of the child was found to be presenting. During a remission of pain, the feet were brought down, and the body soon followed, but the chin, by a violent pain, was forced against and rested upon the symphysis, and any attempt at altering its position immediately induced violent pains. Having succeeded, eventually, in placing the head in a more favorable position, every attempt at extraction was made for upwards of two hours, but without avail. At length I resolved upon diminishing the bulk of the child's head—a resolution which cost me but little pain, as the pulsation in the funis had ceased upwards of an hour and a half before. At this stage of the proceedings, I was joined by the professor of midwifery, McGill University, Dr. Hall, who fully coincided with me in the opinion that craniotomy afforded the best possible chance of safety to the mother.

The patient, therefore, having been placed upon her left side, the body of the child was drawn towards the back of the mother by Dr. Hall, (who had already very dexterously placed the head in the "1st position" of Naegele, and who, with myself, had fruitlessly endeavored, by depressing the chin, to accomplish delivery in that way,) forming an

\* I think it but justice to state that the self-styled midwife is an unqualified and unlicensed woman.



obtuse angle at the neck. Introducing my left index finger, I passed it upwards as far as the obstructed nature of the passage would admit, and, guided by it, introduced the perforator, entering the neck at a point corresponding with the sixth cervical vertebra. Partly by a cutting, partly by a sawing motion, the instrument soon reached the cranial cavity, when, on opening it, a gush of fluid escaped from between the handles; the bones of the skull then collapsed, and the whole slipped easily away. The patient, although in a highly excited state from the consciousness of having such a formidable instrument within her, admitted, during the operation, and afterwards, that she experienced no pain whatever.

On observing the child, we were struck with the enormous size of its head, which, on measurement, was found to be as follows:\*

From occipital protuberance over vertex to nasal spine,.....22 $\frac{3}{4}$  inches.

Greatest circumference of head,.....29 $\frac{1}{2}$  "

Altitude,.....6 "

There was exaggerated strabismus of both eyes; the body was well formed, and of the usual size of a male† child at that period. All the fingers and toes of the body were permanently flexed, and talipes varus of both feet completed the deformity of this truly ugly little specimen of mortality.

On opening the skull from above, the membranes were found to be thickened, and of a deep red color. The pia mater, firmly glued to the arachnoid, was dotted here and there with a pale cretaceous substance, intimately united with it. About a half pint of serous fluid still floated over the cerebral surface of the base of the skull; a film of cerebral matter, about one line in thickness, thickly studded with tubercular matter lined the membranes, except at the superior surface, where it became gradually thinner, and was ultimately lost; so that the fluid must, some weeks prior to birth, have escaped from its cerebral covering, and been converted into a hydrencephalocoele. The small mass of matter representing the brain, and resembling softened cortical substance, bore no resemblance, except in color, to what it should have been; no convolutions or irregularities were visible on its surface. The *optic nerves hung loosely in the cavity*, but no trace of others could be detected. The upper part of the spinal cord seemed to have undergone absorption, for no part of it could be detected from that point of view, and friends seemed indisposed to permit an examination from behind.

To a few points of interest in the above case, I would wish briefly to draw attention, in the order in which they have been related, and—

Istly. *Retroversion*. Retroversion of the uterus, in the early months of pregnancy, is the result, generally, of some mechanical force applied to that organ. We may readily understand how easily a preternaturally

\* It must be borne in mind that these measurements are proximately, not absolutely, correct. The bones of the skull were, as nearly as possible, filled out to their previous dimensions, but the absence of the contained fluid rendered precision impossible. Moreover, the forcible traction employed, previous to resorting to craniotomy, must have interfered with the shape, perhaps increased the size of the skull.

† Dr. Georget, in the "London Medical Repository," Vol. 14, observes: Monstrous, diseased, or mal-formed fetuses, are generally of the female sex. "Is it," he enquires, "that this sex possesses less energy of organization than the male? or that the generative power is longer and more perfect, in the latter than the former?"

distended bladder may tilt over the fundus, and leave it in the hollow, or resting on the promontory of the sacrum. In this case the uterus was in a position nearly the reverse of natural; the fundus pressing against the rectum, the os behind the symphysis and against the neck of the bladder—preventing, in this way, the action of these two emunctories.

2ndly. *Retention of Urine.* At first the cause, afterwards the result of the displacement of the uterus. In this case, so little inconvenience was felt from the distention of the bladder, that the patient thought I was directing too much attention to it, and was not a little surprised at the relief which followed its evacuation. The pains, moreover, were of a character to mislead; they were strong, “bearing down pains,” which the patient aided, by forcibly pulling at a bandage tied to the bed-post, for the expulsion of the fœtus, as she thought—a condition, which, if not speedily relieved, would have occasioned rupture of the bladder.

3dly. *Breech Presentation.* In Denman’s midwifery we read the following:—“It is some comfort to women to be informed, and I believe the observation is almost universally true, that affections of this kind (dysuria) are never produced, except in those cases in which the presentation of the child is natural.” If Denman’s observation be correct, this case must be considered a rare, if not an unique exception; although I can really perceive no reason why exceptions should not be of frequent occurrence.

4thly. *Craniotomy.* Craniotomy in head presentations, is, by obstetricians, considered to be one of the easiest operations which could, for the extraction of the fœtus, be performed. Facility, however, vanishes in presentations of the breech and feet. The head, if large, or even if of average size, with contracted pelvis, lies so high in the “brim,” that the obstetrician’s finger cannot always afford a safe guide to the point of the instrument. In the case under consideration, the whole head, with the exception of the depressed chin, was entirely above the pectineal line. Had the bones of the skull been lined by the ordinary brain matter, collapse might not have followed perforation, and labor might have required to be terminated in some other way; but, notwithstanding this apparent objection, it appears to me reasonable to attempt evacuation of the head through the passage formed in the long axis of the neck, rather than to thrust an instrument unprotected into the cranium, probably, but possibly between the wall of the vagina and uterus, or into the uterus itself. The additional injury to the child would be of small moment, as the operation would not be undertaken until long after the child had ceased to exist.

“Doctors differ” with regard to the period which should elapse before having recourse to craniotomy in hydrocephalic cases. Dr. Ramsbotham is of opinion that it is especially dangerous to allow a hydrocephalic head to remain for any considerable time locked in the pelvic cavity; because from its compressibility and the open state of the fontanelles, it so completely adapts itself to the shape, and moulds itself into the irregularities of the cavity, as to occasion strong, uninterrupted, and almost universal pressure, upon the lining structures, to their imminent and certain hazard,\* while the fluidity of its contents adds on physical

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\* Ramsbotham. American Edition, p. 178.

principles to the danger of these effects. "We know of one case of the kind, in which a hydrocephalic head produced fatal laceration of the cervix uteri. In another case, where the child presented footling, the spine of the neck and part of the soft tissues, covering it, gave way under the traction employed, and the dropsical head was thus emptied and allowed to pass.\* Dewees† once saw rupture of the uterus from hydrocephalus, which craniotomy, early performed, might possibly have prevented. Ramsbotham‡ relates the case of a patient who was delivered of a hydrocephalic child, who had been in labor from Sunday, when the membranes broke, to early on Friday morning, when R. first saw her; she died the same evening. Another author writes: "hydrocephalus in the child is not a common cause of protracted labor, but the diagnosis is very difficult where it is, and if the nature of the obstruction be not early ascertained, the result has generally been unfortunate. \* \* \* \* \* Should the pains have continued strong for some hours, and the head have not entered the brim, the perforator should be employed without loss of time."|| Blundell,§ wishing to guard against undue interference, condescends to be witty:—"Where the head is hydrocephalic, you may if you please, carry your hand into the uterus; you may, if you please, burst the vagina; you may, if you please, rupture the uterus, turn the child, and pull its head from its body; but have some little mercy. Give a trial of those natural efforts, which, by the wise accoucheur, are never hastily distrusted. The natural efforts failing, puncture the head, should the lever or forceps have been previously tried without success."

In breech and footling cases, these instruments are useless, and only protract a delivery which cannot be accomplished with them. Craniotomy, therefore, should be had recourse to, so soon as we are satisfied that we have made use of as much exertion as we think ourselves warranted in doing, after the head had been placed in the most favorable position.

5thly. *Size of Head.* A better idea of this may be formed by comparing it with "average size" heads of a fetus at birth, and of a British Canadian.

|   | Fœtus at Birth. | British Canadian. | Mrs. W.'s Child. |
|---|-----------------|-------------------|------------------|
| From occipital protuberance over vertex to nasal spine, 5½" | 14              | 22½               | 22½              |
| Greatest circumference, .....                               | 14              | 22½               | 29½              |

The records of midwifery that I have been enabled to consult, afford no such instance of a hydrocephalic monster—one alone excepted:—"In 1834, Mr. T. Marsh, Coleford, Gloucester, attended Mrs. ———, in labor with her sixth child. After long delay, Mr. M. dispatched a messenger to some five miles distance for instruments, but before his return, nature—the safest of accoucheurs—had accomplished delivery. The dimensions of the child's head were as follows:—Radix nasi to protuberantia occipitalis, 26 inches; front occipital circumference, 32

\* Forbes Medical Review, Vol. XII., p. 480.

† idwifery, p. 527.

‡ Lee's Midwifery, p. 42.

§ Process of Parturition, p. 272.

|| Obstetric Medicine, p. 60 and 61.

¶ In these measurements of the child's head, no allowance is made for the elongation, which usually, and sometimes to a great extent, occurs in labor.

inches; ear to ear, across vertex, 24 inches. Around chin and across vertex, 30 inches."\* If these measurements be correct, we must, in order to account for unassisted delivery, suppose one of two things to have existed, either an extraordinarily capacious pelvis—such a pelvis as we sometimes "read of"—or a scalp loosely covering the fluid, or, probably, both. Excepting, therefore, Mr. Marsh's case, as an extraordinary anomaly, the largest circumference I have seen recorded is 27 inches.† Instances of hydrocephalic heads, under this in size, are numerous. Two are related by Smellie, in which large heads were expelled.‡ "I have known," says Merriman, "one hydrocephalic fœtus pass entire, whose head was *seventeen* inches; another passed alive, and lived an hour, whose head measured in circumference *twenty-two* inches; both the above labors were long and painful."§ In Perfect's case, the head extracted whole, the breech having originally presented, measured 24½ inches in circumference.|| Heads much under those related by Smellie and Merriman are occasionally met with by accoucheurs.

6th. *The Amount of Fluid.* If the size of hydrocephalic heads vary, the amount of fluid varies also.

In 1751, a Mr. H. relates a case of a fœtus where the head contained a large quantity of bloody serum.¶ Ramsbotham (père) relates two cases in which he supposed each cranium to have held many pints of fluid.\* In Smellie's first case, *three* pints were collected on the cranium being punctured.† In case 20 between two and three pints were poured into the skull, through the opening by which the hydrocephalic fluid was extracted.\*\* Mr. T. Smith, Surgeon, Great Milton, delivered a woman of a child, whose head contained *four* pints of fluid.†† In case related by Dr. Georget, *four* pints of a clear yellowish fluid were evacuated by means of a trochar previous to delivery.‡‡ A woman, pregnant for the eighth time, was delivered by Dr. Hyewier of a fœtus whose head contained *one quart* of yellowish colored serum (*L'Union Medicale.*)§§ Mr. Robertson, of Aberdeen, relates the case of a woman who died 45 hours after delivery of her eighth child, from the effects of pressure upon the organs within the pelvis caused by a hydrocephalic head which contained *four* pints of water.|||| A case is mentioned by Blanchard in which four pounds of water were evacuated from the head of a fœtus after birth.¶¶ The case related by Mr. Marsh, already alluded to, the head contained 154 ozs., or 9lbs 10 ozs. of fluid!\* The amount of fluid

\* London Medical Gazette, vol. xvii., p. 486.

† I distinctly recollect having read of a head of this circumference, but on again looking for the passage containing it I am unable to find it. This, however, makes me no less certain.

‡ Smellie's Midwifery, vol. ii., p. 14 and 210.

§ Merriman's Midwifery.

¶ Ramsbotham, p. 272.

‡ Smellie's Midwifery, p. 42.

\* Practical observations, part 1.

† Collection 81.

\*\* Collection 85.

†† Lancet, 1847.

‡‡ London Medical Repository, vol. 1st.

§§ Lancet, 1847.

|||| Medical Gazette, July 13, 1840.

¶¶ Good's Study of Medicine.

\* London Medical Gazette, vol. 17, p. 986.

in the case of Mrs. W.'s child, cannot be stated with anything like certainty, for we unfortunately forgot to fill the cranial cavity, a proceeding which would have saved much trouble. But, supposing the cranium to have been a paraboloid, then

The circular base being, ..... 29.5 inches  
 Altitude, ..... 6  
 The contents or solidity would be, ..... 207.75 cubic inches.

And allowing  $28\frac{1}{2}$  cubic inches to the pint, the cavity would have contained about seven and one-sixth (7 1.6) pints, wine measure. From this must be deducted the amount represented by the scalp and bones, for the measurements were external; they, being much attenuated, may be represented by 1-6th of a pint, leaving seven pints of fluid;\* a quantity much greater than that in any of the cases enumerated, with the exception of Mr. Marsh's.

7th. *Amount of Brain.* I have been unable, notwithstanding diligent search, to find but two instances resembling this, in *this* particular. Sir Astley Cooper, some years ago, published a case under the somewhat attractive title of "A child without a brain."

Breschet, Surgeon *en chef* to the Foundling Hospital, in Paris, relates the case of a child who lived to the age of 12 days, whose cranium was of the ordinary size, which contained no brain whatever.† Had gestation, in Mrs W.'s case been prolonged to about a week longer, the small amount of brain which existed at the time of parturition, would have been entirely absorbed. As it was, the brain was represented by about a drachm and a half of softened, greyish matter, which might have been easily folded up, and concealed in a thimble.

*In what part of the brain, and at what period of intra uterine life was this fluid first secreted?* It should here be stated, that, during the two months preceding delivery, the patient suffered very much from heat in the right side, which compelled her to lie with cold, wet clothes applied to the part. In the abnormal position of things, the foetal head corresponded to that tender part. Could not the inflammation within the child's cranium, attended, as it no doubt was, by increased heat, have been experienced by the mother? With a small quantity of amniotic fluid, I perceive no reason for doubting that the increased heat experienced by the mother was caused by the hydrocephalic head lying in immediate contact with the abdominal parietes. And, granting this assumption, I should say, in answer to the latter question, that the fluid was secreted at, or shortly before, the period when the patient first complained of pain and heat, namely, two months prior to delivery. "Hydrocephalus—whatever its results—is originally an inflammatory affection situate in the substance of the central parts of the brain, generally terminating by *ramollissement* of those parts, combined with serous effusion,"‡ and, as an inflammatory affection, is characterized by one of the symptoms of inflammation—heat.

In answer to the former question: most probably in the ventricles, these became expanded into large elliptical cavities, and, adopting the description of the first living pathologist, "the cerebral mass around the

\* In this calculation no allowance is made for the unevenness of the cerebral surface of the base of the skull.

† London Medical Repository, vol. 18.

‡ Abercrombie on diseases of the brain, 2nd Ed., p. 148.

ventricles, especially towards the top of the head, became attenuated. Internally and inferiorly, the serum by its pressure flattened the corpora striata and optic thalami, and passing into the third ventricle, it forced these bodies asunder also; the corpora quadrigemina became smoothed, the commissures stretched, and the grey commissure wasted; the pillars of the fornix were forced apart, and, with the septum, driven up against the corpus callosum."† The relative situation of things having been thus changed, the fluid still continued to increase until what remained of the brain, no longer bore any resemblance to what it should have been.

A question here naturally suggests itself: how are we to account for the fact, that the brain can have its substance absorbed; its structure completely destroyed, and yet consistent with life? While the simplest derangement of its functions, is attended with so much peril, during its scarcely less vegetative infant life.

8th. *The strabismus, talipes, and fixed flexure of the fingers and toes.* These malformed conditions—intra uterine symptoms of the congenital disease had evidently existed for a considerable period. The flexors of the fingers and toes had contracted some time prior to birth, and remaining in that condition, the palmar surfaces of the phalanges had been arrested in their development. This deformity was so great, that tenotomy could not have restored them to a straightened condition, without partial dislocation.

As obstetricians are agreed that the diagnosis of hydrocephalus, *ante partum*, is at all times difficult, might not this abnormal position of the smaller joints materially assist in forming an opinion, in arm and footling cases?

Lastly. *Recovery*—Which, notwithstanding a severe illness, was rapid and satisfactory.—*Montreal Medical Chronicle, &c.*

Montreal, July, 1856.

### *Female Education.* By A. P. MERRILL, M. D.

There are few subjects of public interest, which present stronger claims upon the consideration, not only of medical men, but of the community generally, than the circumstances which by a law of common consent, attach themselves to the discipline and instruction of females. With commendable zeal and liberality the people of the South-western States have devoted a vast amount of money, and a large show of talent and learning, to the business of educating and training young females. In view of their own future happiness, and the important station which they are to hold in reference to the present and future generations, too high an estimate is not likely to be attached to this great interest; nor are we to apprehend, that too large a portion of the wealth and talent of the country will ever be appropriated to its support. But there may be danger, that, in the great efforts now making to impart useful knowledge to females, together with those habits of study and reflection, which result from early mental discipline, and the refining accomplishments, music, painting, &c., without corresponding arrangements for an equivalent

† Rokitsansky's *Pathological Anatomy*, vol. 3, p. 275.

system of instruction for the male sex, a discrepancy may be created between those two branches of the rising generation, the tendency of which will be to unfit them for mutual and reciprocal harmony in taste and feeling, and thus lay the foundation for ill-assorted matches, and much of discontent and unhappiness in their domestic relations.

This aspect of the subject commends itself to the consideration of the moralist, and may not be unworthy the regard of the statesman and patriot; but it is to the physiological and hygienic questions that we propose more particularly to address ourselves on this occasion, and we hope to be able to present this branch of the subject in such a manner as to engage the attention of physicians. It will scarcely be questioned that it is not more the business and province of enlightened and liberal physicians, to study the best means for the relief and cure of diseases already established than to discover and make known measures of prevention, and the requisites for improving and amending the physical constitution. If it can be made to appear as true, or even if any well grounded apprehension can be established, that the liberal efforts now making to cultivate the understanding of females, are attended in most cases by such conditions as must necessarily lead to a deterioration of constitutional vigor, and the establishment of feeble health, and feeble bodily powers, it will behoove the medical profession, aided as they may be by the parents of the rising generation, to concert measures of relief—measures for the remedy of an evil of so serious a character as to threaten the well-being, happiness, and even the matured existence of that portion of our race, which is so truly esteemed as *God's last best work*.

No fact is better established than that the powers of mind and body are always impaired by excessive, and especially by unequal use. Persons of all ages are liable to become enfeebled by either excessive idleness or excessive labor, while a just medium will as certainly secure a healthy performance of all the bodily functions, resulting in stability and strength, and by consequence, comfort and happiness. And so, also, of the mental faculties, exercise, even to a laborious extent, is a condition of acknowledged necessity to the existence of mental health and vigor, and even to mental soundness. Inactivity of the mind, long continued and habitual, leads with great certainty in the downward direction of feeble-mindedness and even idiocy, while the opposite condition, long continued over-exertion, without proper periods of rest and recuperation, leads just as certainly in the direction of mental unsoundness and insanity. Both conditions by their extremes, and, by destroying that equilibrium between mental and bodily vigor, which nature intended should exist, have the effect, too often observed among us, to impair the healthy functions of the body, and thus to shorten life.

Now, we are forced to believe, and must, therefore, contend, however unpalatable and unpopular it may be in certain quarters, that the systems of school discipline which so generally obtain in female academies are such as must inevitably lead to the impairment and deterioration of both bodily and mental health. Girls are placed in these institutions either just before, or, in a majority of cases, just after they have arrived at the age of puberty—a period of life when the whole nervous system is peculiarly impressionable, when the digestive organs are active, gorged with blood and liable to feverish excitement, and when the brain and spinal marrow are in progress of rapid development, and exceedingly tender.

These are conditions which require active, regular and almost constant muscular exercise, without exhausting fatigue, abundance of nutritious and digestible food, joyous mental diversion, sound and refreshing sleep, and the careful avoidance of a long continued burden upon the spinal column and pressure upon the viscera of the abdomen and pelvis. It is important, also, that each individual should enjoy, at all times, a full supply of fresh and uncontaminated air, and that the extremities should not be benumbed with cold, or the circulation in them impeded by exhausting muscular inaction, or by pressure of the limbs across the edge of high seats.

But what is the course commonly pursued with pupils in these female schools? The account we have received from an intelligent young lady under our care for the relief of serious ill-health contracted in one of these schools, substantiated as it is by information derived from various other sources, may be taken as a tolerably correct type of a large majority of the female academies in the South-west. We are aware of some exceptions to the rigid confinement and extraordinary requirements, as indicated in this narrative, but are quite convinced that the ameliorations are not generally approved by the parents of the pupils, many of whom seem to think they are not requited with the worth of their money, unless their children are engaged in study during all the day and a portion of the night. This feature exonerates from blame, to some extent, the managers of schools; for, unless their arrangements are made acceptable to their patrons, their pupils will certainly be withdrawn; and this fixes the responsibility where it properly belongs, with parents and guardians. Parents are constantly making the discovery, when it is too late to remedy the evil, that the health and happiness of their daughters have been sacrificed, and that young women born to the inheritance of a sound constitution, and a life of independence and plenty, have become even before attaining their full growth, the pitiable victims of irremediable disease, which is rendered the more painful and distressing, in many cases, by the constant but ineffectual efforts which are made to obtain relief. Victims in the first place to a false system of mental and bodily training, they become the painful and tantalized victims to the various phases of charlatanism which prevail, and sometimes die in the very prime of life, of some one of those chronic diseases which should only be found the accompaniment of mature age and decay.

The narrative of a pupil, to which we refer, is in effect as follows: We are required to rise with the sun, and in winter somewhat earlier. Only a few minutes are allowed for dressing, when we are summoned to prayers. These being ended a number of the girls practice their music, while those without instruments study their lessons. An hour is thus spent, when breakfast is announced. We proceed to the table and eat quickly and silently. A half hour or so is then allowed for rest and recreation, but no active and boisterous exercises are permitted. Then we enter the school room and submit to a strict confinement for four hours, relieved only by a recess of fifteen minutes. While not reciting lessons it is deemed a serious infraction of rules, to look up from our books. The first session is ended by the signal for dinner, which is a short and frugal meal, and those whose turns to practice their music come after dinner, are obliged to hurry away to their tasks. The afternoon session begins after the intermission of an hour, and continues three hours, with



one recess of fifteen minutes. Then a portion of the pupils are dismissed, a few take their turns practicing their music, and nearly always a considerable number are detained in school, because of their not having given satisfaction, either in their lessons or behavior. After an early supper, an hour in winter, and an hour and a half in summer, is spent in silent study, when the signal is given to return to bed. Much of the time in the winter season we sit in a room which is so imperfectly warmed that our feet are benumbed with cold, and to prevent a still greater depression of temperature, ventilation is carefully guarded against. The air of our crowded dormitories is rendered particularly impure by confinement, which is painfully apparent to those who enter them from the fresh air.

We had designed introducing here a memorandum furnished by an experienced teacher, but the account given in this differs very little from the above, showing fully as much time devoted to study and close confinement. It represents also, that in some boarding schools so little time is allowed for eating that the food is too rapidly consumed, and when the signal is given for retiring from the table some are still eating. "The whole arrangement for eating was as unphysiological as it well could be. The food was not in quality or quantity suited to the wants of the young ladies. The principal meat was fat bacon—sometimes boiled with greens—but often fried and swimming in fat, which for lack of butter was eaten with avidity by the hungry pupils. Dishes of fat, greasy gravy were a prominent feature on the table."

There is, of course, not a perfect uniformity in the arrangements of different schools; but all are objectionable in a greater or less degree, in the confinement and want of exercise, in the long and continued mental application, in the multiplicity of duties and studies, in the want of ventilation and warmth, in the diet and rapidity of eating, and in the want of joyous mental recreation. The mind of the pupil is treated as a safe and capacious receptacle for all sorts of knowledge, which has only to be thrown in pell-mell, and all being retained without wastage, for future use, the subject is well educated just in proportion to the variety and quantity supplied; while the bodily frame is considered in the light of one of those ingeniously contrived engines, which only requires to be wound up every morning, and well greased three times a day, to be kept running perpetually, and without change.

Now, the effect of all this upon the constitution and functions of both body and mind, may readily be divined by every well informed and experienced physician. The mind, crowded with a medley of strange facts and theories which it has not time to arrange or digest, and habituated to learn without habits of thought and reflection, presents a confusion of ideas which can never be reduced to order, and causes a surfeit of study which can never be overcome. And this is called a *finished* education. More palpable still is the impression made upon the bodily organization and functions. The digestion is impaired, the secretions are deranged, and the nervous system has lost its healthy tone and vigor. Constipation, habitual headache, depraved appetite, disturbed sleep, anastural obstruction, swollen extremities, fatigue upon slight exertion, cough, frequent alternations of mental excitement and depression, and sundry and various anomalous derangements of the bodily functions, render the girl sickly, unhappy, and ill-tempered, at the very period of life when she

should and might be in the full and happy enjoyment of both bodily and mental health, buoyant and lively, at peace with herself and all the world besides. We do not mean to say that all suffer to the same extent, but none can fail to experience some of these ill effects, if subjected to such discipline for any length of time; and many there are, doubtless, who continue to suffer through life, and transmit the effects of their unphysiological education to succeeding generations.

The evils of injudicious systems of youthful training, are rifest in those portions of our country where there has been the least experience. Time and observation correct them. Take the ancient city of Boston as an example. There was a period when the evils we complain of existed there to the same extent they do now here. Constitutions destroyed and the hopes of parents blighted, have drawn to the subject the attention of the ablest and most influential men, under whose influence and advice such reformatory measures have been effected, as would seem to an inexperienced observer to indicate the existence of an opposite extreme. Witness the following regulation of the "*Girl's High and Normal School* :—

"There shall be one session of five hours each day, from 8 A. M. to 1 P. M., from May to October, and from 9 A. M. to 2 P. M., from October to May."

In this and all other schools in Boston a recess is not only allowed for recreation, but it is provided that every pupil shall have daily some kind of physical or gymnastic exercise, and the following regulation is also rigidly enforced :

"In assigning lessons to be studied out of school hours, the instructors shall not assign a larger lesson daily, than a boy of good capacity can acquire by an hour's study; but no out of school lessons shall be assigned to girls, nor shall the lessons to be studied in school be so large as to require a scholar of ordinary capacity to study out of school in order to learn them."

These regulations result from two centuries' experience in the instruction of youth, and in a city which has produced and is now producing annually, a larger number of scholars, male and female, of high educational attainments, than any other city in the world. The present aim and purpose is, to rival all other cities of the world, also, in the constitutional health and mental vigor of its people, of both sexes.

We call upon the educated men and women of this part of the country; who, from their own experience and their knowledge of the opinions of others, are qualified to judge of the importance of a reformation of the evils complained of, to set about effecting a change in public opinion, upon which alone can the reformation be founded. And we call especially upon physicians, who witness daily in the most difficult and uncontrollable diseases, the result of these errors in mental education and bodily training, to come to the rescue, and make such efforts as they can to preserve this interesting portion of our population from constitutional ruin, and from the frightful prevalence of those diseases peculiar to the sex, which are among the *opprobria* of our profession.

The evils of excessive confinement, interminable study, multiplicity of books and superficial teaching, resulting mainly from attempting to do too much in a given period of time, extend to all southern schools, so far as we have observed them. Besides the monstrous error before referred to, that education is successful in proportion to the length of time allot-

ted to study, and the variety of branches taught, there is another error scarcely less mischievous prevailing, which considers it a part of the province of schools, to act the part of nurseries, to keep young children out of the streets and out of mischief, and thus to relieve parents from a considerable portion of their onerous duties, to the sacrifice of health, and the impairment of the usefulness of teachers. Public sentiment has done, and is doing much to reform these evils, and in those parts of our country where they enjoy the benefit of the best experience, five hours a day is the longest time allowed for school exercises, and there are those who contend that four and even three hours are sufficient for this purpose. *Memphis Medical Recorder.*

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[From the Archives Generales, May, 1856.]

*Of the Possible Cure of Suppurative Arthritis with the Preservation of Mobility.* By DR. HYPOLITE BLOT, Chief of the Obstetric Clinic of the Faculty of Medicine of Paris.

The object which I have proposed to myself to accomplish, is sufficiently indicated by the title of this essay. I wish to adduce facts to prove what I have not seen mentioned in any, either of our classical treatises, or in monographs on the diseases of articulations, viz.: that a termination of suppurative arthritis with the preservation of motion in the joint is, if not a common, yet at least a possible event.

To demonstrate the correctness of what I have stated in relation to the opinion of surgeons upon the different modes of termination of suppurative arthritis, it will be sufficient to adduce a few passages from the principal authors that I have been able to consult in relation to this subject.

Boyer and the surgeons who preceded him, do not describe at all the inflammations of the joints as distinct diseases; they include their history in that of white tumors, and, in relation to these, they agree in stating that, when these affections are complicated with purulent effusion into the joints, ankylosis is the most fortunate issue that can take place. To find these diseases separately considered, it is necessary to refer to treatises that are altogether modern.

In the *Dictionary of Medicine* we find Velpeau stating that "the least that can happen, when suppuration occurs in such cases, is an *irremediable ankylosis*. In other cases he may be so fortunate as to find the discharge to cease, at least in part; the general sympathies become quiet, the affection becomes purely local, permitting to the surgeon the possibility of a complete removal of the disease by amputation, or resection of the articulation."

In relation to articular ostitis, Sanson thus expresses himself: "Difficult to arrest, even in its incipient stage, it becomes almost impossible to check the disease when suppuration is established. We may then but very rarely hope for a cure, and that generally with an ankylosis of the bones."

In the same work, (El. de Path. Med. Chir., 4th Edit.,) in reference

to traumatic arthritis, we read again : " When pus is formed in the interior of an articulation, the disease becomes much more serious. Imprisoned in a capsule, the pus effects a change in the synovial sac, the cartilages become eroded, and terminates by involving the spongy extremities in destructive caries. Sometimes a point of the articular capsule is destroyed, and the pus burrowing in the cellular tissue forms often extensive sinuses in which it accumulates and becomes decomposed. The life of the patient is then doubly compromised, by the abundant suppuration and by the effect of its resorption ; *anchylosis is inevitable*."

M. Begin, in treating of traumatic arthritis, concludes his article relative to the prognosis and termination of the disease, as follows : " In the rarest and most fortunate cases, the secretion of pus gradually abates ; from all the parts surrounding the joint, from the synovial membrane as well as the cartilages, cellular and vascular granulations arise, which, coalescing, obliterate the cavity of the joint and cause a firm and solid adhesion of all the contiguous parts. The joint of the patient is then *irremediably ankylosed*."

In the same work, (*Dict. de Med. et de Chir. Prat.*), in speaking of rheumatismal arthritis, M. Roche says : " In some cases the synovial becomes inflamed and suppurates, the cartilages become eroded and ulcerated, the bones become softened and carious, and there is no resource but in amputation or in resection of the joint."

M. Vidal is no less explicit. " In all cases in which it becomes necessary to make a prognosis," says this author, " it should be given with much caution and reserve, for it is either due to an internal cause when it is complicated and will recur, or it is of a traumatic origin, in which case it becomes extremely grave ; for if the patient is cured, it will only be at the expense of the functions of the joint."

As to M. Nelaton, occupying a purely surgical point of view, and not having devoted a special article to the consideration of arthritis, he has not found it necessary to express an opinion upon the diverse modes of termination of this affection.

In the *Compendium of Surgery* the following occurs relative to acute arthritis : " When it terminates by suppuration and the formation of an abscess in the joint, we have everything to fear, and amputation may become necessary to save the life of the patient."

From all the citations that have been adduced, it is evident that authors are unanimous in the opinion that suppurative arthritis always presents an unhappy mode of termination, the patient sometimes succumbing from purulent infection, in others, amputation above the joint or resection becomes necessary ; and again, in others, more rare and perhaps more fortunate anchylosis occurs, and the patient is cured with loss of motion of the articulation. I will only add that, having interrogated most of our masters of surgery in reference to their having observed any other mode of termination than those above indicated, I have uniformly received a negative response.

Besides, I have searched in vain for facts analogous to those which I shall report, in the rich collection of cases published by Brodie upon this subject as well as in most of the leading French periodicals.

It seems to me, therefore, interesting to report certain observations made already some time since, which conclusively establish the fact that another and more fortunate mode of termination of suppurative arthritis

than those before indicated, is possible; to wit, *a cure with preservation of the motion of the joint.*

These observations, although but three in number in the human species, added to analogous ones related by our colleague, M. H., Bouley, at the Society of Biology, as occurring in the equine species, will suffice to prove the *possibility* of the mode of termination we have designated. Future researches will determine in what proportion of cases of suppurative arthritis we may venture to hope for so happy an issue.

One of these observations I owe to the kindness of M. Monod, who communicated to me the principal details of the case in 1848, during a conversation in reference to what I had myself seen. The second case was observed by myself in a patient introduced into the infirmary of the Maternity of Paris, to which I was then attached in the capacity of interne. Both cases occurred in females soon after parturition. I will hereafter state what importance should be attached to this peculiarity. It is moreover to be well understood that we do not here treat of those multiple articular abscesses which are observed to occur in puerperal fever, but of mono-articular arthritis, freely developed and uncomplicated with any grave constitutional condition.

In regard to the third case, it is borrowed from the clinics of Professor Nelaton, who has kindly permitted me to treat of it in connection with the two preceding cases. This was a case of traumatic arthritis of the knee, developed in a young man of eighteen years.

CASE 1. The female P., aged eighteen years, a laborer of good constitution and sanguine temperament, was born of healthy parents, and had herself never been sick. Menstruation commenced at sixteen years of age, and continued regularly until she became pregnant. During her entire pregnancy she suffered not the least illness.

The 20th Feb., 1848, without appreciable cause, she gave birth to a male child weighing 2500 grm.,\* at the eighth month of her pregnancy. A vertex presentation in the ——. The birth was natural after a labor of eighteen hours. No accident occurred during the day, but during the night a violent attack of colic occurred for which she was conveyed to the Infirmary.

Feb. 21st. Simple cataplasms with laudanum were sufficient to calm the pains.

Feb. 23d. The abdominal pains had entirely ceased. She, however, complained of pain in the right foot, which she compared to spasmodic pain. No marked local affection, however, could be detected by the most careful examination. Slight redness and tumefaction on a level with the internal malleolus was all that was observed; but all movement of the tibio-tarsal articulation was very painful. Six leeches to the part tumefied; a bath followed with a large linseed cataplasm. To secure the influence of position, the limb was elevated upon a cushion, and to avoid the pain of motion, the foot was fixed by bandages to a hoop that sustained the covering. General condition good; no appreciable fever.

Feb. 24th. The patient was much relieved; she suffers now but very slightly, when the limb is moved. Poultice renewed twice a day.

Feb. 26th. The amelioration is not continued; the tumefaction has

\* The gramme is about equal to 15 grains Troy.

increased, especially in the malleolar region; fluctuation, however, is not distinctly perceived. Treatment continued.

March 31. Since the 26th Feb. the tumefaction has continually augmented notwithstanding the means employed, and fluctuation in the malleolar region has become quite distinct. An incision, about an inch in length, was made on both sides of the joint, from which flowed a considerable quantity of laudable pus, mixed with strings of synovia, easily recognized by its yellowish color and syrupy consistence permitting it to be drawn out in long filaments. A soft probe introduced into the internal incision, penetrated more than two inches in depth and passed without difficulty into the tibio-tarsal articulation. On withdrawing it, it was readily made to pass into several of the other tarsal joints by changing its direction. Without the joint the probe was arrested by fibrous bands. When the foot was moved upon the leg it caused a sharp pain, a rough friction sound, a sort of crepitation, could be distinctly heard and felt. This fact was confirmed by all the persons present at the time. Same position of the limb maintained, and the same treatment continued.

March 4th. Very evident improvement; pain of the joint less severe; suppuration more abundant; proportion of synovia greater than yesterday. Treatment continued.

March 9th. Suppuration diminishes from day to day, the pus becoming more liquid and the proportion of synovia increasing. Pains none when the foot is not moved. Same treatment continued.

March 15th. Suppuration is completely arrested, and the pain has quite ceased. Even slight movements of the foot excite no pain. Same treatment continued.

March 18th. The incisions are nearly closed; the tumefaction having ceased, the joint is restored to its normal volume; the patient is able to move the foot without pain; the friction sound and crepitation have also ceased. The cataplasms were replaced by a simple unguent.

March 26th. The incisions being healed, and the movements painless, the joint may be considered as completely cured.

March 29th. The articulation again and without assignable cause swollen and painful, and the surface somewhat red. Cataplasms. Elevation.

March 30th. All the symptoms augmented, and apparently a slight fluctuation felt about the malleolous internus. An incision gives issue to nothing but blood. Treatment as before.

March 31st. Patient improved; suffers but slightly; incision uniting.

April 2d. Symptoms all disappeared. Treatment discontinued. Rest in bed.

April 5th to 17th. During this period the patient gradually acquired the power of using the limb without inconvenience, and left the maternity without the slightest trace of ankylosis or rigidity.

CASE 2. Madame X., thirty-five years of age, of a nervous temperament and good constitution, had a very fortunate first accouchment with the exception of an unusual nervous prostration which lasted five or six hours. Lactation was quite normal.

She became pregnant a second time, and now suffered much more than during her former pregnancy. A removal and the cares of a large household caused her during the last months to undergo great fatigue. Her accouchment, however, took place at term without accident, but shortly after that, singular nervous phenomena again occurred, accompanied this

time with anguish and insomnia. The mammary secretion was but slight, and towards the fourth or fifth day after accouchment, simultaneously with the cessation of the nervous symptoms, a serous effusion occurred in both knee joints which continued to increase notwithstanding every effort. At the end of a month, the effusion in the right knee was entirely absorbed, but the distension of the ligaments had been so great that the tibia was partially luxated outwards, and the motion of the articulation was considerably impaired.

In the left knee resorption of the fluid could not be obtained, and the joint remained greatly distended. Perfect rest with cauterization were quite ineffectual. During the second month, an acute inflammation supervened without appreciable cause, terminating in suppuration; a spontaneous and abundant discharge of pus soon occurred from the inferior and external part of the articulation. No serious constitutional symptoms occurred; several counter-openings were made at different points, and the healthy suppuration gradually diminished. About a month after the opening of the purulent abscess of the joint, the knee was cured. From that moment, the motion of the joint was gradually restored, but the power of flexion could never be carried beyond a right angle.

**CASE 3** *Traumatic suppurative arthritis cured without loss of motion of the joint.* A shawl maker, eighteen years of age, punctured the left knee joint with the point of the scissors employed for shearing the shawls. At first, he gave very little attention to the injury, but after the eighth and tenth day, a considerable swelling of the joint occurred, and the patient solicited and obtained permission to enter the Hospital St. Louis.

The case presented all the signs of a penetrating wound of the knee. A very extensive, white, oedematous tumefaction had taken place resembling that of *phlegmisi alba dolens*. The lips of the wound were flabby, whitish and oedematous. A sero-purulent liquid issued from the wound, increased by pressure upon different points of the articulation. Adopting the treatment extolled by M. Fleury, the entire joint was enveloped in a vesicating plaster.

Notwithstanding this measure, the tumefaction remained unabated. The liquid flowing from the wound became more and more purulent, until it no longer contained any serum, and every day a considerable discharge from the original wound and from the counter-openings took place. Perfect rest in a wadded splint.

Somewhat later, the discharge again became more serous, which character augmented until it finally ceased. In six weeks, the wound was completely closed. The power of motion in a slight degree still existed. The difficulty at first existing became less and less, and at the end of three months, the patient presented himself to M. Nelaton, having completely recovered the motion of the joint. He now returned to his former occupation of shawl-making.

To the preceding cases I will add another, addressed to the Society of Biology, by Prof. H. Bouley, of Alfort. Our colleague presented the temporomaxillary articulation of a horse, in which suppurative arthritis had existed for some time. A considerable quantity of pus flowed from the diseased joint, especially during mastication to which the animal was urged, notwithstanding the pain it produced, by the intensity of hunger. Desiring to ascertain the state of articulation, M. Bouley sacrificed the animal, and on examination found that the cartilages from both the tem-

poral and the inferior maxillary surfaces had completely disappeared, and were replaced by red and vascular vegetations, densely crowded together, covered in spots with smooth osseous plates. The synovial membrane had entirely disappeared.

M. Bouley is of the opinion that the joint which, at the death of the animal, was suppurating but little, was in process of healing, and founds this opinion upon observations in a considerable number of other cases in the same species of animal. It appears, indeed, that suppurative arthritis of the temporo-maxillary articulation, is not rare in the horse, and it is often observed that the animal, urged by hunger, maintains the freedom of the joint by use, and a complete cure is effected after a longer or shorter period.

It is scarcely to be expected that similar observations should be made upon other joints, especially upon those of the legs; for, as is well known, when a horse has received so serious an injury as to be incapable of any service, he is not deemed worthy of preservation.

Such are the facts to which I desire to call the attention of surgeons.

I will endeavor now in a few words to present the reflections that flow very naturally from them.

When we seek to account for the happy exceptions which I have presented, two interpretations present themselves prominently to the mind, one having reference to the special conditions in which the first two patients were placed; the other may be applied to the mode of treatment which one of them received. The two cases referred to, presented themselves in fact during the puerperal period. May not this condition itself furnish or suggest an explanation of the cause of the fortunate issue of these cases? I am inclined to adopt that opinion.

The facility, and especially the rapidity with which pus is formed in the puerperal state, may furnish an explanation of the effusion and accumulation of pus in joints, without the occurrence of such profound lesions of the synovial membranes and cartilages as to render ankylosis inevitable; the transformations have not had time to become so grave as to prevent the articular surfaces from returning to their normal condition and a consequent restoration of their function of motion. This view of the subject, yet hypothetic, may hereafter acquire the value of a demonstration, if opportunities occur of examining the elements of the joints affected with suppurative arthritis in puerperal females, who have succumbed from intercurrent diseases.

But until direct proof can be adduced, the hypothesis here put forth may apparently derive support from the peculiar facts observed in our second case, to-wit, the presence of a distinct quantity of pure synovia mingled with the laudable pus furnished by the joint; the relative quantity of the former always increasing as the arthritis progressed towards a cure. How, indeed, can the continued secretion of synovia be explained without admitting that the synovial membrane has preserved its integrity, at least to some extent? This observation seems moreover to possess some direct practical utility. From the light of this observation, the surgeon should, if I am not mistaken, be capable of making a clearer diagnosis in a given case. The prognosis being as much less serious, and the prospect of cure the greater as the proportion of synovia in the fluid that issues from the joint when opened, is augmented. This hopeful anticipation being moreover enhanced, if, while from day to day the synovia increases, the purulent secretion suffers a corresponding diminution.



The preceding reflections are especially applicable to the first two cases, and might cast a doubt upon the probability of obtaining similar success in ordinary cases. But the third case is quite different. In this, we find a genuine suppurative arthritis not occurring in a puerperal female, but in a young man of eighteen years. Taken in connection with the case of comparative pathology above cited, this case seems to compel the admission that suppurative arthritis is susceptible of cure without loss of motion of the articulation.

As to the treatment, perhaps, that was not entirely foreign to the success obtained. It will be recollected that, as soon as suppuration became manifest, free incisions were made on both sides of the joint.

By thus avoiding the serious accidents indicated by all writers on this subject, as the separation and infiltration of muscles, denudation of bones, &c., &c., perhaps, also by thus diminishing the granulations of the synovial membrane, the wasting of the cartilages, the inflammation, suppuration, and sometimes the necrosis of the osseous extremities of the articulation, we shall augment the chances of curing the diseased joints and preserving, if not the complete, yet the greater part of the mobility of the articulation.

I am well aware that, at first sight, these views seem to be contradicted by what daily experience teaches in regard to the gravity of wounds communicating with joints; indeed, it is well known that such lesions are the more serious, and more frequently followed by suppuration in proportion to the size of the wound and the greater facility for entrance of air into the cavity of the articulation. These objections, however, are believed to be more specious than well founded, for the two elements of the comparison are not analogous. In one case, we dread to see suppuration supervene, in the other it has already occurred, and measures are not indicated to avoid it, but to render it as harmless as possible. The best means for attaining this object will probably be to avoid the prolonged contact of the pus with the synovial surfaces, by giving it a free and early exit.

It is hardly necessary to add that these reflections are submitted to the mature judgment of our distinguished surgeons with great reserve and hesitation.

Whatever may be the influence of treatment, the cases of which we have given the principal details prove that in suppurative arthritis the surgeon ought not to despair of curing the patient, and preserving the functional integrity of the limb.—*Peninsular Journal*. A. S.

*On the Use and Abuse of Chemical Baths.* By G. HUFF, M. D., Lexington, Kentucky.

*To the Editor of the New York Medical Times:*

DEAR SIR.—Permit me to hand you some remarks on the use and abuse of chemical baths, which may lead some of your readers to give the subject due consideration. Very respectfully, yours,

G. HUFF.

When we consider the deleterious effects of mercury upon the constitution at times, especially when its use has been injudiciously persevered

in for some time in small and often repeated doses, in certain constitutional diseases in which mercury is commonly resorted to as a specific, we are led to fear that it often proves to be a greater evil than the disease itself. And if we take into view the facility and certainty of the galvanic action in the elimination of the deleterious metals from the human system, and the practical use to the community, its application must rank as one of the most valuable discoveries in modern therapeutics. I have observed, however, through life that the more valuable any discovery to society, the greater its abuse; and in no case has this been more fully verified in the healing art within the last half-century, than in the transference of metals from the human system. This branch of the profession is left entirely too much in the hands of charlatans.

Facts proving that deception has been practiced to a great extent have come within my own observation; and recently the reputed experience of the editor of the *Louisville (daily) Journal*, in the supposed efficacy of chemical baths, and more especially his proposed test of their action by means of ammonium, have caused great sensation in this part of the country. These circumstances led me to make an experiment with a rabbit, an animal that never had taken mercury in any form; and I herewith forward you the result, viz., a copper plate, a portion of which is nicely coated with a light metal generally known as tin. By the mercenary, a coating like this is continually palmed off for mercury taken from the system of those who have supposed themselves surcharged with that metal. Those persons who practice such feats of legerdemain, invariably use metallic bath-tubs, the same as was done by myself in the experiment with the rabbit, and the coating of light metal upon the piece of copper is simply a deposition of tin from the tub; and the process was nothing else than electroplating, with a rabbit in the solution.

Then, again, the experience of the editor referred to proves nothing, as there was no evidence of mercury having been extracted. The sulphide of ammonium, the test relied on by him, will give a black precipitate with lead, copper, bismuth, tin, and lastly, iron, provided the free acid be neutralized, which may be done in this experiment, by adding excess of sulphide of ammonia, and then the black sulphide of iron will be precipitated as well as with mercury. The precipitate of mercury in a *dilute* solution turning instantaneously black is not characteristic of that metal, as may be tested by any person by merely putting one drop of a solution of corrosive sublimate into a tumbler full of water, and having stirred it, then adding a few drops of sulphide of ammonia, when it will be seen that the precipitate changes from a light-yellow quite rapidly to black; but unless the black sulphide be reduced, and mercury obtained from it in a metallic form, the test is not conclusive. Had a little of the supposed "black sulphide of mercury" been dried and mixed with cyanide of potassium, or carbonate of soda, and heated to redness in the sealed end of a small glass tube, the mercury, if present, would have been sublimed in metallic form in the cold portion of the tube. But it does not appear that this was done, and consequently there is no conclusive evidence that mercury was obtained from his system, but, on the contrary, he was probably deceived. The black sulphide might have been either the protosulphide of tin, or of iron, which change may take place under the following circumstances:

1st. If a patient be placed in a metallic bath tub of copper or iron tinned, containing water with some hydrochloric acid, with a bright plate of copper under his feet, and the negative pole connected with it, and the positive pole with the bathing tub, in the course of fifteen minutes or less after the battery is put in action, the copper plate will be completely coated with tin, save the portion that was covered with his feet; and if a tumbler full of the solution of the bath be tested with a few drops of sulphide of ammonium, it will give a black precipitate of protosulphide of tin; which it would not have done previous to the battery having been put in action.

2d. The same effect will be produced if the patient has the negative pole in his hands, with his feet upon a polished plate, *it being insulated*, and the positive pole in contact with the bathing tub. The person in connection with the negative pole more or less serves as an electrode to the plate upon which a deposition of metal (tin) is wanted for deception. This experiment may be made very readily by any person having a battery of sufficient power. Persons in connection with a battery are in this way led to believe that the metal thus deposited upon the plate beneath their feet passed from their system, as they felt during the process (of electroplating) as if they were "pierced with ten thousand needles." This would answer a very good purpose if such persons would recover from their infirmities in consequence of their belief. But, alas for the poor dupes! they remain without benefit. I am acquainted with a person that has reaped an abundant harvest within the last seven months by such duplicity. And I fear, as a general thing, the profession is not as well posted in *electro-chemistry* as they should be; as I have known some physicians to witness the *modus operandi* as aforesaid, and supposed the deposit of tin upon copper was the "Simon pure" from the human system.

3d. If a zinc bathing tub be used under the same circumstances as the preceding, the same effect upon a polished plate will follow; and the solution will give a blackish precipitate, which is owing to the iron always being present in the commercial zinc, which latter, when pure gives from its neutral solution a white precipitate. It is always necessary to add the sulphide of ammonium in slight excess to neutralize the acid of the bath, as the iron will not precipitate in acid solutions. If there is much organic matter present in an acid bath, the sulphide of ammonium will give a dirty sulphur precipitate.

It is certain that very few persons in any community are aware that tin can be eliminated in solution from a bath-tub, and deposited upon a plate of copper within the said tub; hence the credulity of the public is taxed by those who are greedy of gain. In order to manage fairly and effectually those persons who suppose themselves surcharged with mercury, all metallic bath tubs should be dispensed with, and those only should be used which are made of a non-conducting material, such as porcelain, stone glass or marble. A simple porcelain foot-tub is as good utensil as can be used for the purpose, as it is not at all necessary to immerse the whole person; the immersion of the feet is only a few inches of the solution being all that is required for the process of transferring metals from the human system.

It is truly unfortunate that the medical profession should be so prejudiced against other modes of treating diseases than such as they learned

in early life, just\* as if science is not progressive. If such prejudices did not exist, the public would not suffer so much by empiricism; and if they patronize men without science, it is certain that they have lost confidence in legitimate practice.

LEXINGTON, KY., April, 1856.

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Communicated for the Boston Medical and Surgical Journal.

*Homœopathy.*

Men are familiar with the advertisements of disguised medicines, which continually appear, and sink into neglect, again to be brought forward under a new name, and perhaps slightly altered in appearance. It is now difficult to find a person who credits what is urged in favor of any one of these nostrums; and they are used, for the most part, when a cheap article is made choice of, such directions as go with them being cheaper than the advice of a physician.

They manage such things differently in Germany. Besides the usual extravagant pretensions, each one is there specially anxious to show that his own nostrum is in the height of fashion, and is used by the nobility everywhere. They endeavor to get the recommendation of some prince or baron, and sometimes with success. The same course was followed by those charlatans who got up the system of medical practice called homœopathy; and when it was imported into this country, that course being continued here, some of the American "aristocracy" were a little, a very little, imposed on thereby. But if any wish to inquire, they can find that homœopathy has for sixty years been scouted by nearly all persons of the higher ranks in Europe; and that the only evidence that it ever was fashionable, is derived from some homœopathic source. The kind of evidence that a lawyer delights in, is that which is wrung from the witnesses of his opponent; and we in this paper rely chiefly on the writings of the homœopaths themselves. Their periodicals are all in reality quack advertisements, under the disguise of scientific publications, as any well-informed person may ascertain by examination. Though no more credible than such advertisements in other cases, especially when they speak of their success, yet that which they contain adverse to their own pretensions is not unworthy of observation. They continually complain that they are subjected to the laws against quackery, which exist in most European countries, and are enforced more or less strictly in different places.

From the *British Journal of Homœopathy*, published at London, October, 1853, p. 665, it appears that no homœopathist ever practised in the large republican city of Frankfort before 1848; that one who began business there, about that time, was soon expelled from the city by the magistrates, solely on account of his method of practice; that he then took up his residence in a neighboring village, within the bounds of Hesse Cassel, and visited his patients in the city as before; and that for these visits he was fined and compelled to leave the neighborhood. From the silence of subsequent publications it would seem that no homœopathist has been permitted to practice there since.

In the same quarterly, for July, 1853, p. 485, it is said that homœopathy was never practised in Rome until Dr. Wable removed there in 1843, after his residence at Leipzig had been made disagreeable by "persecution"; and that for a long time he met with great difficulties in getting permission to begin business; though latterly his practice was large. It appears from the article that the time when those difficulties were removed, and his practice became large, was at the setting up of the last Roman Republic in 1848. At the restoration of the Pontifical government, his practice seems again to have been interfered with, for it is mentioned that he had leisure to travel into the north of Germany.

In the *North American Homœopathic Journal*, published at New York, May, 1852, p. 127, speaking of the political events, it is said that in France, Italy and Germany, revolutions, and still more reactions, have hindered the progress of homœopathy; and that tyrants, at the instigation of their court physicians, will not foster it. From this it should perhaps be inferred that after the revolutionary movements of 1848 were subdued, the homœopaths were again subjected to the degradation from which the outbreak had relieved them, and that the laws against them were executed more rigorously than before, because some had neglected homœopathy to meddle with state affairs. In the *Quarterly Homœopathic Journal*, published at Boston, July, 1850, p. 300, it is said that Dr. Wumb, one of the first homœopaths in Vienna, was a captain in the students' legion, during the revolution, and took part in one of the battles; and that the reaction has nearly destroyed him.

The *Philadelphia Journal of Homœopathy*, for February, 1854, p. 688, says that homœopathic practice, after a comparatively free course in Bavaria for twenty years, was interdicted in 1842 in all the public institutions of the kingdom; and that in 1848, the year of the revolution, the prohibition was removed, but was again imposed soon afterwards.

The *British Journal of Homœopathy*, for April, 1855, p. 328, says that homœopathy was prohibited in Austria in 1819; and though that prohibition was said to have been removed a long time afterwards, their journals also say other things inconsistent with that assertion. The *Quarterly Homœopathic Journal*, for July, 1850, p. 305, speaking of Austrian tyranny since the revolution, says, "the rescript of the government, permitting the homœopathic practice to all physicians, has never been allowed to be published." That rescript would seem to have been the product of the revolution, and to have lost its force when the emperor recovered his power; and it is said on the same page, that some homœopaths, "in order not to be discovered, pretend to prescribe allopathic medicines which their patients never take, using homœopathic medicines all the time according to the actual directions." Instead of appearing openly, as men of fashion like to appear, they are obliged to hide their doings from the police. Still, it has repeatedly been written that homœopathy is more flourishing in Austria than on any other part of the European continent; and since they are reduced to such expedients, how must they manage in places where they are yet more restricted? As astrologers and other fortune tellers have managed to lurk in the shade when their arts are prohibited, so homœopathy has by some means prolonged a degraded existence without being able to convince magistrates that its pretensions are true. Were they true, it must have been eagerly received by all, more than fifty years ago. It is now practised by only a few hun-

dre? in al' Europe, while of regular physicians there are hundreds of thousands.

The *North American Homœopathic Journal* for May, 1853, p. 271, contains an extract from the *Zeitschrift für Homœopathische Klinik*, published in Germany. It gives an account of the state of homœopathy in 1852. It recognizes its low state in Prussia, and other northern parts of Germany; also in France, Sweden, Denmark and Russia, but says it flourishes in Austria, Bavaria and other southern countries of Germany. It says that in England it flourishes more than in Germany itself; that the number of practitioners is there large, and that, "above all, America seems to have given it the warmest embrace." The *British Journal of Homœopathy* for July, 1853, p. 480, speaking of a register of the names of their practitioners in Europe and America, says "the latter especially, is a most formidable list." We have here important data. The United States, it would seem, contain more homœopathic practitioners than Europe, England more than Germany, and the south of Germany more than the north.

The *North American Journal of Homœopathy* for November, 1852, p. 493, contains a list of their practitioners in New York and the principal Atlantic cities. The editors show an anxiety to make the number appear as large as possible. The number given for New York city is 63; for the rest of the State, 242; Philadelphia, 53; Boston, 20; Providence, 9; Baltimore, 10; Washington, 2. Total, 398. This is the list so much admired by the Europeans; and as in the scattered population of the south, and of the country towns of the west and east, they fail in finding adherents sufficient for support, there is no reason to suppose that one hundred others could have been reckoned in the country.

The *Quarterly Homœopathic Journal* for April, 1850, p. 285, quoting the *British Journal of Homœopathy* for the January preceding, gives a list of the British practitioners. The number is 48 in London, 51 in the rest of England, 10 in Scotland, and 7 in Ireland. Total, 117. Though the number in Germany they thus show to be insignificant, no credible evidence is found that it ever was larger. The Central Homœopathic Union of Germany, which collects to its meetings as many as possible of the practitioners of that country, held its annual meeting in 1854 at Weimar, in a densely populous region traversed by railroads. The number present was published, for it seems to have been unusually large. It was twenty-seven, of whom two were styled apothecaries, and one a veterinary surgeon. The year previous, the meeting was appointed at Hesse Cassel; but the homœopaths were prohibited by the sovereign of that country from assembling within its dominions. (*See Brit. Jour. Hom.*, Oct., 1853, p. 688; and Oct., 1854, p. 683.)

As men of eminence have in some instances resorted to homœopathy, in times of doubt and terror, so they have resorted to dealers in false pretensions of other kinds. The last named journal, for Oct., 1853, p. 670, publishes a certificate alleged to have been signed by the Marshal de St. Arnaud, declaring that he had just been completely cured, by homœopathy, of a disease that for fifteen years had seriously troubled him. The disease referred to must have been the one which soon afterwards proved fatal to him, at the close of the battle of Alma. The same page contains his answer to a request that he would use his influence to relieve the homœopaths from the legal disgrace that burdens

them in France; but though he was then Minister of War to Louis Napoleon, he with some ambiguous, courtly expressions of regard, declined to take the first step in the matter. Though he consulted them as he might have consulted fortune tellers, he seems to have held them in no higher estimation.

The degree of success, which has attended them in this country, has resulted from their groundless assertions that they are everywhere patronized by the most fashionable, the most intelligent, and the most learned; and in fact some of the American literati appear to have been rather easily captivated by their elegantly printed publications, and even half convinced by their external appearance alone. There is a sort of natural philosophy, admired by many, called transcendentalism, whether correct or otherwise it is not to the purpose here to inquire; but the chief of the works on homœopathy are written in the style of transcendentalism, and contain many of its peculiar expressions and modes of thought. Yet it is not transcendentalism, but an imitation of it merely; so, of course, the German metaphysicians consider it, or they would not have despised it, as they all do, except some few of very peculiar acuteness of penetration. Had they received it, the practice of it would never have been forbidden. It is not only counterfeit science, and counterfeit fashion, but counterfeit transcendentalism. The American votaries of this philosophy have, some of them, been prone to take the counterfeit for genuine; and it is not rationally to be expected that such as have resided not many weeks in the neighborhood of German libraries, and are but moderately well versed in the things of Germany, can have developed those powers of detecting German counterfeits, which the natives of that land themselves possess.

*The Effects of Dentition on Nursing Children.* By M. TROUSSEAU.

[Clinical Lecture, delivered at the Hotel Dieu. Translated for the Boston Medical and Surgical Journal. From the Gazette des Hopitaux, Dec., 1855.]

The most elementary questions in medicine are often the least understood. It would seem, at first sight, that we need not much concern ourselves about the trifles which daily swarm beneath the feet of the practitioner; but remember that Stoll has written a chapter entitled *De quibusdam magni momenti minutis*, and learn early to neglect nothing.

The infant has twenty teeth, the adolescent twenty-eight, the adult thirty-two. The evolution of the twenty teeth of the infant is not completed before the thirtieth to thirty-sixth month; but they are only temporary, for, at the age of seven years, he begins to lose them, exchanging them for others which are more durable. This process is normally accomplished at thirteen or fourteen years. Except the great king, who formed an exception to everything, and who was born, it is said, with two teeth, the infant comes into the world with defenceless jaws, and it is not till towards the eighth month that the first milk teeth appear. But since the laws of nature are capricious, it often happens that one infant has teeth at four months, while another has none at the end of

a year; hence no limits can be fixed. Generally, the two middle incisors of the lower jaw first appear, and I anticipate a stormy dentition whenever I see a child begin that process by the upper teeth. These two first teeth appear together, with an interval of twenty-four hours, forty-eight hours, four days, and sometimes a week, between them, but always *together*, remember, and they are the only ones which present themselves in this manner. Six weeks or two months afterwards, the two superior middle incisors make their appearance, not together, but at the distance of eight, fifteen or thirty days from each other. The process of dentition is thus very rapid for the first two teeth and more slow for the others.

Meanwhile, two other teeth are about to protrude—the lateral incisors of the upper jaw—very soon, one or two months, after the upper middle incisors. Towards the end of one year, the child has six teeth, and whereas he began with two lower, he has finished with four upper.

The teeth of children appear in *groups*; *dentes in infantibus catervatim erumpunt*: first group, two inferior, middle incisors, at about eight months; second group, two superior middle incisors, towards ten months; third group, two superior lateral incisors, at one year, more or less; fourth group, two inferior lateral incisors and the first four molars (six teeth in this group, from fourteen to eighteen months); fifth group, four canines, from eighteen to twenty-four months; sixth group, four second and last molars, from thirty to thirty-six months.

The canine teeth appear after the infant has twelve teeth, and when he is from eighteen to twenty-four months old; their evolution lasts from two to three months, sometimes of ten months, then takes places, and at the age of three years, when those of the last group have pierced the gums (the four second molars), the process of dentition is finished.

It is not without object that I have spoken of groups; you will see that a knowledge of this arrangement is very important in respect to weaning. It is a fact worthy of consideration, that immediately after a group of teeth has appeared, there is an interval of rest for the child. Prompt, then, by this interval to wean, for the moment is propitious. Do you know what is commonly done? Children are weaned indifferently when they have two, seven, nine, eleven, fourteen teeth; no attention is paid to the number. Now, I entreat you to pay close attention to this, otherwise you will lose your little patients by that terrible affection of the intestines, *cholera infantum*.

You will often be consulted as to the time for weaning; never give an opinion, therefore, until after a scrupulous examination of the state of the dentition, and do not authorize the mother to wean her infant until it has six, twelve, or sixteen teeth. Good practitioners will never permit a child to be weaned after the evolution of the first two teeth; the patient is too young; he is ordinarily but eight months old. It is only by careful management that you will succeed after the eruption of the third group; still, if you are strongly urged by the parents, consent, for you have before you a month or six weeks of respite before the evolution of the fourth group. Allow it, then, in case of necessity, but never forget that the child has only six teeth, that he is only a year old, and that artificial alimentation will not always be successful.

The most favorable period for weaning is, beyond all doubt, the interval separating the fourth from the fifth group. The child, in fact, is



armed with twelve teeth, eight incisors and four molars, and he has before him a tolerably long time of rest, about two months, during which there is no reason to dread any intestinal trouble, and when the canines begin to appear (which group causes the greatest danger in its evolution), he is accustomed to his new diet, and prepared for the crisis, which he is about to undergo.

Learn, then, to wait until after the fourth group, before weaning. If the health of the mother or nurse, or the circumstances of the family, oblige you to authorize an early weaning, always see that there are six teeth; but if, on the contrary, you are not obliged to yield to considerations of this nature, do not allow weaning until you can count twelve.

Do not imagine that things always go on so regularly. You will see children who have the molars before the incisors, or the superior incisors before the inferior incisors; for although dentition ordinarily takes place in the way I have described, it is no less true that it frequently presents irregularities which greatly perplex the physician who is earnestly watching for an interval of repose. In such a case, do the best which the circumstances will admit of; examine the state of the gums, and have the child weaned immediately after the complete evolution of a tooth, which will probably be followed by a period of repose, during which you will have leisure to guard against evil consequences.

Among the affections which are common to dentition, the most important, the most grave and the most obstinate are seated in the alimentary canal. A few days before it begins, the infant is restless, wakeful, cries violently, sucks its fingers, bites the nipple, refuses to feed, if it takes supplementary nourishment, and sometimes will not nurse. Its gums are red, and there is a very evident prominence at the points which the teeth are about to pierce; there is cough, the voice is changed, the mucous membrane of the mouth is irritated. From the moment the child has two teeth, the neighboring gums become inflamed, and the protruded teeth will be surrounded by a ring of red and swollen gum.

If you give mercury to a person who has no natural teeth, but who wears an artificial set, you will not see salivation, nor mercurial stomatitis, follow. But if the patient have a single tooth remaining which has escaped destruction, the effects of the mercury are manifested around it. The gum surrounding the tooth will inflame, while the rest of the mouth will be free from disease. The same is true with regard to the first two teeth; their eruption causes no affection of the gums, which, however, swell and become red with the evolution of the second and succeeding groups.

In almost all children the process of dentition is accompanied with diarrhoea. This is sometimes moderate, consisting of three or four dejections only, daily, but it is frequently excessive, with green stools, resembling chopped herbs, or grains of curdled milk, with glairy and sometimes bloody matter. In certain cases marked tenesmus manifests itself, with prolapsus of the rectum. These symptoms, which precede, by several days, the eruption of the tooth, often continue, and even last until the entire group penetrates the gums. If the diarrhoea does not cease, you are aware what treatment should be adopted, and what attention should be paid to the diet. You will restrain and mitigate it as much as possible.

Would you advise weaning during this diarrhœa? No, unless the nurse's milk seems to keep up the intestinal flux.

During the summer season, the injurious effects of dentition are chiefly directed towards the intestines, very rarely upon the air passages. Intestinal derangements, fever, peripneumonic catarrh, and other morbid pulmonary manifestations, occur in the winter.

I must warn you against a popular prejudice which I advise you to oppose on every occasion that offers. You will hear it said again and again that diarrhœa is beneficial to children; believe it not, for too often it will cause the death of your little patient. Diarrhœa prepares the way for chronic enteritis, and chronic enteritis debilitates and destroys its victims. On the contrary, restrain the intestinal flux, and you will find that the other symptoms are much better borne.

In the same way, it is considered highly advantageous to leave untouched the filth which covers the head of a new-born infant. This ridiculous prejudice no longer exists in England or America; let us do away with it here.

When, during dentition, the evacuations are merely more loose than common, without amounting to diarrhœa, this slight derivative effort requires no interference, but it should not be allowed to continue too long.

It has been said that convulsions are common with infants whose bowels are constipated, but do not attack those who have diarrhœa. This is not true. Convulsions almost always accompany diarrhœa, and are prevented by a good state of the bowels.

I call your attention particularly to the diet, as a point of the greatest importance. If you neglect caution in this respect, you will have diarrhœa, followed by enteritis, serious indigestion and eclampsia. Nothing is more common than severe cases of indigestion, aggravated by enteritis, and leading to convulsions; and nothing is more alarming to the parents, who generally lose their senses, and while the domestics or the neighbors run to bring the doctor, the mother, following the advice of some officious gossip, pours hot water over the hands and feet of her infant; he is scalded, and dies from the effects of it. This reminds me of what occurred to an eminent brother-physician, Professor Marjolin, during the course of a typhoid fever, which threw him into a state of profound stupor. They applied to his legs napkins wet with water at a temperature of 158° Fahr. Large eschars followed, which were not completely healed for several months.

If convulsions occur, the less you do, the better. The attack, indeed, is most frequently over when you arrive, and although there may be a slight recurrence once or twice during the day, the remembrance of it, only, is left, the day after. If there have been indigestion, administer a laxative, in order to expel any undigested food; allow the child to nurse but little, give it water with some albuminous substance in solution, and in an urgent case, a bath, and you will soon see the alarming train of symptoms disappear. Almost any treatment succeeds in the majority of cases, even the infinitesimal doses of that absurd system—homœopathy.

*Case of Congenital Cephalocele.* By W. A. PECK, M. D., Berwick, Pa.

The following case, which I have determined *cephalocele* in its generic signification, occurred in the practice of Dr. J. A. Wilson.

On the 15th of June, the Doctor was called to Mrs. S., to attend her during her first parturition. Her gestation was of the normal term; labor advanced as usual up to the rupture of the membranes, at which time an examination was made, which occasioned no little embarrassment concerning the nature of the presenting part. An elastic, soft, and deeply fissured surface presented which was at first supposed to be the breech, but upon further examination, none of the genitals, or other characteristics of this presentation could be detected. The nature of the part remained a profound puzzle until the birth of the *caput solv*ed the mystery. The tumor presented, followed by the vertex, and the child was delivered as in normal labor. The child was a female, of the usual size and conformation, save the abnormalities of the head. Its physiognomy is very well represented by the outlines of Dr. Robrer's case, as given by Dr. Meigs in his work on Obstetrics, (page 221,) though somewhat exaggerated. The form of the cranium was conical, with the frontal region somewhat flattened, and the occipital bone quite protuberant; though, as a whole, symmetrical, and of the usual size. This shape of the cranium, with an imperfectly developed state of the inferior maxilla and prominent malar bones, presented a peculiar vacant, idiotic expression. The cranial bones were completely ossified and firm; suture complete; and fontanelles closed, or nearly so.

The integuments presented at first their normal temperature and color; vessels full, with occasional pulsation; and the scalp thinly covered with hair, except on the most exposed portions of the tumor. The tumor was about the size of the foetal head at 'term;' in its general contour spherical, and about equally divided on the surface by a transverse fissure, of an inch in depth. Its attachment was by a pedicle, of about two inches in diameter, whose centre occupied the occipital protuberance. The upper margin of the pedicle extended to the lambdoidal suture, and its inferior attachment to the inferior semi-circular ridge of the occipital bone. The skin covering the tumor presented its normal appearance near the pedicle, and in the fissure, which shaded off, however, into an attenuated, transparent structure, through which could be clearly recognized large patches of capillary erectile tissue, and plexuses of dilated veins. In consistence, the tumor was quite soft, elastic and distinctly fluctuating. It was loosely attached to the skin, as also to the cranium. Its softness enabled me to demonstrate the continuity of the occipital bone under the pedicle, by inserting my fingers from either side, until the whole tract was explored. By firm and constant pressure, which had the effect of awakening the child from its usual somnolent state, its size could be very much reduced. When thus reduced, pulsation was but slight, but fluctuation more palpable. Long continued compression of the carotids also had the effect of reducing its size and corrugating the skin on its surface. When in its ordinary state of tension, a venous murmur was very perceptible.

This is the result of my physical examination, six days after the child's birth; and I am assured by the Doctor, that this accurately defines its previous history. At this time, the transverse diameter was 4

inches, vertical about 5 inches, and circumference about 18 inches; though these measurements were variable at different times of the day, owing to the different states of the circulatory system, or at least were coincident with them.

A few hours after birth, the child was seized with a spasm, which lasted about twenty-four hours, since which time nothing of the kind manifested itself until the day of its death. It would receive from one to two teaspoonfuls of nourishment at a time with facility, after which, fluids would be ejected from the mouth without deglutition. Its bowels were disposed to be constive though not enough so to demand much medication. However, the skin became very much jaundiced, and the urine scanty and deeply tinged with bile. The child now became lethargic, with an entire absence of voluntary action of any kind.

The skin of the general surface, in the morning was cold; this was succeeded by ordinary heat during the middle of the day, and in turn in the evening by high fever. When the general surface was cold, the tumor was very much reduced in size, and its investing integument corrugated. When natural temperature succeeded, the tumor presented the character above described; but when fever set in, there was a strong determination of blood to the head; the face, scalp, and eyes were deeply suffused; the arteries were throbbing; veins distended, and the tumor greatly enlarged; becoming more firm, less fluctuating, with an increased pulsation and venous murmur, and the skin shining and transparent. The child would now be wakeful. These exacerbations of fever passed off with copious perspiration during the last two days of its existence. During the same period, and at the same time of the chill, the left arm, side and leg became livid, and spasmodically affected, without any concurrent action of the right side. This was attributed to an ulcerative abrasion of the skin on the left side of the neck, which, as it merely affected the skin, could afford no adequate explanation of the phenomena. During this time, the tumor was undergoing very important changes. Its growth was rapid; so much so that at the day of its death (then twelve days old), its several diameters were one half greater than those above given.

Through the importunities of the friends, Dr. W. was induced to puncture the tumor with a lancet. This was followed by profuse arterial hemorrhage, which persisted, in spite of styptic applications, for two days. On examination I discovered that the site of the wound was in a *large tract of cutaneous erectile tissue*. The hemorrhage was followed by a copious serous exudation.

The attenuated portion of the integument had now become mottled and livid. In some places exudations would take place which would discharge a sero-sanguinolent fluid; at others, large patches of skin would vesicate, which, when ruptured, would discharge large quantities of *sero-purulent* fluid. Unlike the sanguineous discharges, the serous, when profuse, would very materially lessen the size of the tumor. These effusions now became very copious, excoaration very extensive, and finally the whole mass became succulent and loathsome, and on the twelfth day the unfortunate being died.

It is to be very deeply regretted that circumstances prevented an autopsic examination, which would have relieved us of the necessity of making a conjectural diagnosis. When we take into consideration the

peculiar form of the cranium, the exacerbations of chills and fever, the suppression of the secretions, the spasmodic and paralytic symptoms, the pedunculated form of the tumor, its situation, the fluctuation, it would seem to be a well marked case of *hydrencephalocoele*. Unfortunately, however, this conclusion would be successfully controverted by a fact which was easily demonstrated, i. e., that there existed no opening in the bone through which such a hernia could protrude. As before stated, the posterior fontanelle, and the entire surface of the occipital bone having any relation whatever to the cephalocoele, was closely examined and with positive results. Discarding, then, the idea of *hernia meningeae*, or *encephalocoele*, we still have a dropsical tumor, as is clearly shown by the fluctuation, its being limited in its compressibility, its being most fluctuating when most compressed, by the nature and quantity of the effusions, etc. And not only this, but there is abundant evidence to show that it was a venous erectile tumor, as well. Witness, for example, its compressibility, its pulsation, the venous murmurs, the effect of long continued compression of the carotids, the effect of different states of the circulation, for example, determination, the hemorrhage, the plexuses of veins that were clearly recognizable, etc. We think ourselves justified in attributing to the tumor the two pathological elements above mentioned, from all the rational and objective symptoms to be derived from the tumor itself. But what are we to say of the paralysis, the convulsive and spasmodic action, the coldness and blueness of the left side, and the state of the organic functions? We have but one resort, i. e., if the tumor had no connection with the nervous centres, it exercised the strongest possible sympathetic sway over both the cerebro-spinal and sympathetic systems.

Concerning its cause, perhaps some might be curious to know that those matrons who are reputed to have founded medical science, marvelously elucidated the etiology of this affection in this wise: When Mrs. S. was one month advanced in gestation, her father-in-law was confined to bed with double inguinal hernia. Having an urgent call to defecate, he jumped out of bed in her presence, when by accident the distended scrotum was observed, to her great terror and dismay, and to the repetition of a similar deformity about the foetus, *perhaps erroneously* upon the head, and most certainly so, in that the fissure was transverse.

It required no great stretch of their imaginations to suppose this idea absolutely confirmed, by the presence of the fissure, which they supposed to be the septum. By the way, physical examination proved this septum to be merely apparent.

I do not feel warranted in discarding this explanation, however, merely from the singularity of the site of the tumor, as there are other cases on record of similar coincidences. An account of a congenital cephalocoele, occurring on a boy of 11 years, is recorded by Mr. Hosmer in the Boston Med. and Surg. Journ. for Nov., 1855, in which the following cause was assigned by the mother. "While she was pregnant, a large hog, which had recently been emasculated, passed frequently by her house. *The appearance of the animal produced an unpleasant sensation in her, which caused her always to place her hand upon her head.*" From the brief history of this case, I should judge it to be one of *encephalocoele*. These cases (though dissimilar in that one tumor contained brain, and the other none,) might by some be made parallel, by taking into consideration the

different states of the objects of aversion. Or, perhaps, the reverse view would be entertained by some of the great psychological lights of our age, *i. e.*, to suppose the tumors to be real and imaginary phrenological elongations of the cerebellum, which would be in keeping with phrenological demonstration, *i. e.*, by coincidences.—*Medical Examiner.*

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### *Æsthetics of Medicine.*

The science of medicine has enlarged its bounds in all directions. The microscope has opened to our view the secrets of minute anatomy; the patient experimenter tells of the varied functions of the organism of man; whilst chemistry, with rapid strides, has invaded the domain of vitalism, and thrown new and brilliant light on the darkest portions of the animal economy. During this period of rapid advance in the theory of medicine, the more practical departments of the art have not been stationary, and the changes and improvements in the management of disease, both medical and surgical, are even more wonderful than any of the discoveries of the micrographer or the experiments of the physiologist.

If the question could have been asked Sir Astley Cooper or old Ben Bell, what would be the greatest boon which could be vouchsafed the surgeon, he would have replied, "give me the power of operating without pain." It is done. In the language of an eloquent contemporary, "the knife is searching for disease; the pulleys are dragging back dislocated limbs; nature herself is working out the primal curse which doomed the tenderest of creatures to the sharpest of her trials; but the fierce extremity of suffering has been steeped in the waters of forgetfulness, and the deepest furrow in the knotted brow of agony has been smoothed forever.

The wondrous effects of ether are hardly known, before, in the discovery of chloroform, we have a pain controller of even greater power, whilst the class of "local anæsthetics" is increasing daily, and now we read of tumors painlessly removed under the influence of the freezing mixture, and the still more recently discovered properties of carbonic acid gas.

These triumphs of art have almost blinded us to the many improvements which chemistry and pharmacy are constantly yielding in the modified and improved preparations and combinations of medicine, and in admiring the showy and striking results of anæsthesia in the field of surgery, the more humble but yet equally valuable discoveries in the department of medicine are in danger of being overlooked. Medicine has its æsthetics as well as surgery, and the sick chamber, under the influence of the refinements of pharmacy is rapidly losing much of its ancient horrors.

Compare the condition of a sufferer wasting away with slow fever, or some other prolonged and painful malady, as he now is, and as he once was. Then, the curtained bed and the carefully closed room guarded his fevered body from the slightest breath of air. Now, the ventilated chamber, the open window, the grateful fan and the cheerful light are kindly and liberally vouchsafed him. Then, the cautious doctor warned him of the danger of one mouthful of water. Now, the tinkling ice and the

refreshing acid cools his parching throat. The nauseated stomach was then thrown into increased torture with neutral draughts and saline mixtures ; but now the citrate of potass delights the palate and calms the unnatural temperatures, and "Abernethy's black bottle" is replaced with the effervescing magnesia, which charms the fastidious taste, and allays the irritable organs.

But let us imagine our unfortunate to have survived the rude shocks of pill and portion, and only needing the cordial tonic to bring him at last from his chamber of torture. He is not yet released. Bark, says his attendant, is the one thing needful, and hourly doses of the ligneous material distend his stomach, intermixed it may be with the still more revolting electuary, whose nauseating sweets make the whole mass a perfection of horrors. How different is the fate of him whose happy lot has fallen in these æsthetic days. His speck of crystallized quinine is impenetrably concealed in the fragrant coffee, or neutralized with tannin, and his iron and treacle transformed into the elegant formulæ of Blancard or Vallet. Should his ingenious and complaisant medical adviser be sometimes forced to appeal to some of the old physics, he calls for a capsule of Lehuby or Requin, and envelops in its gelatinous cavity the once dreaded remedy.

Such are some of the triumphs of pharmacy over the armamentum medicum of our fathers ; and let not our readers disregard the great advantages to be derived from their use in the management of disease. Under their influence, we can often make the sick bed a place of comparative comfort, and even use our remedies alike to gratify and to cure. In the treatment of children, these elegant preparations are of inconceivable value. No longer does the little victim's nose writhe between the thumb and fore finger of his determined nurse, or the medicine spoon force its way between the resisting teeth ; but now the patient eagerly looks for his medicine, and hugs his once dreaded foe to his breast. The physician is thus enabled to cultivate with the children under his charge the most kindly relations, and the hour of visit, which was once the signal for discord, is now transformed into a friendly reunion.—*Virginia Med. Journal.*

## EDITORIAL AND MISCELLANEOUS.

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### CLOSE OF LECTURES.

The Course of Lectures, in the Atlanta Medical College, will close with the last of August, to be resumed again at the regular period, the first of May, 1857; and for the benefit of those who are grossly ignorant, or disposed to wilfully misrepresent, we state that there is only *one* Session or Course of Lectures in this institution *annually*, and degrees are only conferred *once* a year.

The principles of the Institution and the requirements, being the same with those of the highest in the land; and without going into other grounds of objection, of which we occasionally hear, such as authoritative declarations, upon the part of jealous and self-important professors in other schools "that we cannot teach Anatomy in the summer," we would merely point our remaining enemies to the fate of their *leader*, poor Ramsay, (whose highest ambition seemed to be to crush the Atlanta Medical College,) and warn those who continue their dishonorable opposition to the interests of this School, that unless the doctrine of a special providence fail, a heavy retribution will yet fall upon their selfish heads.

At last, however, the *number and character* of those who have been engaged in this war upon us, has grown "small by degrees, and beautifully less," and the hostile demonstrations which are occasionally exhibited, may be looked upon, merely, as the scattering shots of "*inglorious retreat*." We have no hesitation in asserting that we shall exhibit to the country the most conclusive evidence that the necessary facilities for medical education are furnished here; in the character and qualifications of those whom we shall send out as graduates.

There are now quite a large number who have thus become connected with us, and whose interests are identified with ours, and to whom we are looking with the most confident anticipations, as sources from which their Alma Mater is to de-



rive credit and honor, as the result of their successful career. And it is with no little pleasure that we are expecting to aid in building up science and the just reputation of many who have been students here, by *recording* the results of their investigations, when they shall have engaged in the practical pursuit of their profession. And we cannot too strongly urge upon them the importance of careful observation and a faithful record of their practical professional life, not being deterred by the fear of criticism from contributing their aid to the advancement of science; but, having by earnest and persevering labor, acquired a knowledge of their calling, or, in other words having *learned a fact* in Atlanta, *know it* as certainly as if it had been acquired in London or Paris, for as there is "no royal road to learning," so there is no royal *seat* of learning; Science at the *South*, being equally Science, North, East or West.

To all, then, who have sustained the relation of student to this Institution, and especially to those who are about setting out upon life as physicians, we would say, proceed cautiously, yet boldly, and with honest and earnest purpose, to the discharge of the weighty responsibilities you have assumed—maintain a "conscience void of offence, both toward God and toward man," and with energy and perseverance, you cannot fail to reap a rich reward here and hereafter. And in conclusion, as our connection as teacher and student is about being dissolved, without indulging in the set terms, or honied phrases of a formal farewell, but as the out-going of the overflowing hearts of the Faculty, we have to return our sincere thanks to the Class for their uniform courtesy, kindness and consideration, and for the faithful assiduity with which they have devoted themselves to their duties; and while it is a relief, of course, that our labors are suspended, it is in all honesty coupled with regret that such pleasant associations are about to be sundered, and hoping that all who have had any connection with us, may meet with full success in life, and that they may *deserve* even more than they receive, we leave with them, as a stimulus to exertion, and a parting sentiment in relation to our noble profession, "If you look to its antiquity, it is most ancient—if to its dignity, it is most honorable—if to its scope, it embraces a world in its arms."

## REPORTS AND ANNOUNCEMENTS RECEIVED.

We find upon our table the "Fifth Annual announcement of Lectures of the Miami Medical College, of Cincinnati, for the Session of 1856-7." They say that "the success of the College has been all its warmest friends could have anticipated. The number of students has been constantly increasing, while the aggregate number in the majority of Schools has diminished."

They report 63 Students and 18 Graduates for the last Session—the next Session commences on the 15th of October, and continues until the 1st of March.

Also the "Report and Announcement of the Medical Department of the University of Pennsylvania, for the Session of 1856-7." The number of Students in attendance during the past Session was 372, and the number of Graduates 142. The 91st Session will commence on Monday, the 13th of October, and be continued until the middle of the following March.

Also the "Circular of the Faculty of Oglethorpe Medical College, at Savannah, Ga., with a Catalogue of the Students and Graduates, and Announcement of Lectures, for the Session of 1856-7."

There seems to have been a re-organization of the Faculty, since the last Session, and in their announcement it is stated that "Its Faculty and friends are determined to make it second to no Medical College in the Country, in the abundant facilities which it shall afford, to impart a thorough Medical education to those who may patronize it. So may it be, and thus deserving, receive the fullest success—while we desire to see all prosper, we confess to a special interest in the success of Southern Colleges, and with the growing feeling upon the part of the South, that our young men ought to be educated at home, if the proper facilities are offered here, they will assuredly be appreciated sooner or later. Students 38, Graduates 8. Lectures commence 1st Monday in November, and close 1st of March.

We have also the "Annual Circular of the Trustees, Faculty and Students of the Medical College, of the State of South Carolina, for 1855-6," with which the eminent Dickson is con-

nected. The institution seems to be in a very flourishing condition, the Class in attendance upon the last Course of Lectures amounting to 220, and the number of Graduates 86. The next Session commences on the first Monday in November, and terminates on the first Saturday in March following.

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#### NEW ORLEANS SCHOOL OF MEDICINE.

We would desire to call attention to the advertisement of the "New Orleans School of Medicine" to be found upon the cover of this number. We learn that their new building, large enough to seat comfortably 250 Students, will soon be completed, and everything will be ready for the Lectures, at the time specified. Most of the Faculty are now visiting physicians, and the Professor of Surgery is Resident Surgeon at the Charity Hospital, and the Board of Administrators having allowed them the free use of that Institution during the Course of Lectures, they certainly have it in their power to offer superior advantages.

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#### PENNSYLVANIA COLLEGE OF MEDICINE.

We have (since the notice of other Institutions) received the announcement of the Pennsylvania Medical College, with the advertisement of the next regular Course of Lectures, (to be found upon the cover of this number,) commencing on Monday, the 13th of October, and continuing until the 1st of March. Though it has never been our pleasure to visit the Institution, from the high character of the gentlemen composing the Faculty, we are satisfied that it is one of the most promising Colleges in the Union.

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☛ The number of Matriculates in the Atlanta Medical College, for 1856, is 105.

— We perceive from the Circular of the Oglethorpe Medical College at Savannah, that L. J. Robert, M. D., of Marietta, Ga., has been appointed to the Chair of Physiology and Pathology, in that Institution.

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From the Medical Examiner.

*Record of Medical Sciences.*

*Purification of Water supplied to Towns, etc.*—At a recent meeting of the Society of Arts, the method proposed by Dr. Clark for purifying water for the supply of towns was described by him, and its applicability for this purpose discussed.

The substances with which water is contaminated may be in two states—suspended and dissolved; both may contain mineral and organic substance.

Spring water contains from 1-200 to 1-1000, or even 2-1000, dissolved substance, but no suspended substance. This is the case with many kinds of water in and around London; but, when collected at the surface in reservoirs, and exposed to light and air, vegetation commences, and is succeeded by the development of animalcules. After a time, both the plant and animal organisms pass into a state of putrefaction, and become a source of serious contamination.

The water of rivers generally contains less dissolved substance than that of the springs in the same district, and it also contains suspended substances of various kinds that are washed into the rivers from the banks by small streams, rivers, &c.

The separation of suspended substance is effected either by subsidence or by filtration.

The nature of the dissolved substance depends upon the kinds of strata traversed by the water; it generally consists, for the most part, of calcareous salts—sometimes with magnesian salts—alkaline salts, ammoniacal salts, rarely, and in small amounts.

The calcareous and magnesian salts communicate to water the character of *hardness*. This character varies considerably in amount in different kinds of water, and is expressed in degrees, each degree of hardness being as much hardness as a grain of chalk, or the lime, or the calcium, in a grain of chalk, would produce in a gallon of water, by whatever means it may be dissolved.

The hardness of most of the water around London is owing to the presence of dissolved carbonate of lime. The amount is so large, that the average supply of water to a single family would yield in eight months 100 pounds of chalk, and in 100 gallons of water there is enough to destroy 35 ounces of soap.

Carbonate of lime itself is very sparingly soluble in water; probably 5000 gallons would be requisite to dissolve one pound avoirdupois. But when combined with an additional amount of carbonic acid, it forms bicarbonate of lime, which is so much more soluble in water, that one pound of carbonate with seven ounces additional of carbonic acid would

dissolve in 400 gallons of water; and this is about the amount present in well-water from the chalk strata.

The carbonic acid may be separated from carbonate of lime by heating, as in the ordinary operation of lime-burning, and the lime thus obtained is still more soluble in water than the bicarbonate of lime; so that a pound of carbonate of lime, consisting of—

Lime.....9 ounces,

Carbonic Acid.....7 ounces,

yields a quantity of lime that may be dissolved in 40 gallons of water.

Thus it appears that carbonate of lime, itself scarcely at all soluble in water, may be rendered soluble in two different ways—either by being deprived of its carbonic acid, or by combining with an additional quantity of carbonic acid.

It is by the latter of these two changes that water, in traversing chalk strata becomes so highly impregnated with carbonate of lime; for carbonic acid is always abstracted from the atmosphere by water during its condensation as rain, &c., and a further amount is frequently dissolved by the water in percolating the vegetable soil.

To separate this dissolved carbonate of lime, so far as may be practicable, is the object of Dr. Clark's method of purification. It is based upon the fact that when a solution of bicarbonate of lime, such as ordinary water, is mixed with a solution of lime, half the carbonic acid is abstracted from the bicarbonate, and both lime and bicarbonate of lime are converted into the very sparingly soluble carbonate.

When this operation is so managed that the lime added is just sufficient to form carbonate with the surplus carbonic acid in the bicarbonate, almost the whole of the dissolved carbonate will be removed from the water, and only so much will remain dissolved as corresponds with the solubility of carbonate of lime.

|  |  |                         |           |
|--|--|-------------------------|-----------|
| Bicarbonate of lime<br>in 400 gallons. | } Carbonate of lime 16 oz.<br>Carbonic acid..... 7 oz. | } =16 oz. carb. of lime | } =2 lbs. |
| Lime in 40 gallons<br>of water.        |  |                         |           |
|  | ..... 9 oz.  |                         |           |

This residual carbonate of lime is always small in amount. Supposing in the above instance, the 400 gallons contained  $1\frac{1}{2}$  oz. dissolved carbonate of lime, 1011ths, or 16 oz. would be separated, and only  $17\frac{1}{2}$  oz. be left in solution. The water, before being softened, would destroy 35 oz. of soap for every 100 gallons; after being softened, the same quantity would destroy only 5 oz.

Most water contains, besides carbonate of lime, calcareous and magnesian sulphates, chlorides, &c. These substances communicate hardness to water, as well as carbonate of lime; but there is this difference—that the hardness, owing to the presence of these substances, is not removed by liming. This, however, is not of any practical importance, so far as regards the purification of the water supply of London by this method; for the hardness of the water around London is chiefly owing to carbonate of lime.

Without, perhaps, being prejudicial to health, the disadvantages arising from the presence of carbonate of lime in water, are numerous and considerable.

1. It is the principal cause of the incrustation of steam-engine boilers.
2. It causes a great, and at the same time useless, increase in the con-

sumption of soap, and is deposited in dirty linen in such a manner as to fix the dirt, and prevent its being rendered white.

3. For many culinary purposes it is less suitable than soft water.

Dr. Clark's method is remarkable, inasmuch as it differs from most chemical operations in not introducing any other substance into the water in place of the carbonate of lime separated; and moreover, the separation is effected without the use of any substance foreign to the water in its natural state.

There is another effect produced by this method of purifying water, which does not appear to have been at first anticipated by Dr. Clark. It is the removal of organic substance.

In general the wholesomeness of water is much more affected by the presence of organic substance than by mineral substance; and it seems to be a fact well established by observation, that some of the poisons producing epidemic disease find a congenial habitat in water contaminated with organic substance. Moreover, when organic substance in water undergoes putrefaction, the sulphates always present in water are decomposed, and sulphurated hydrogen generated. The deleterious character of the water of the Niger was ascribed by the late Professor Daniell to this circumstance.

The amount of organic substance in water may be very minute, but it must not on that account be regarded as insignificant. The amount of organic substance in the most defective kinds of water supplied in London, is very small in proportion to the mineral substance; but it is generally considered by recognized authorities, that, under certain conditions, this organic substance may acquire such a state as to produce disease in those drinking it habitually. In this respect the cause of disease existing in water is analogous to that known as sausage-poison, and that producing the frequent fatal effects of a cut with a dissecting knife, neither of which appear to be chemically tangible.

Investigations relating to the last epidemic of cholera have shown that in one district in London, containing a population of 500,000, which were chiefly supplied with water by two different companies, there were over 4,000 deaths from cholera during the epidemic. The only recognizable difference in the conditions and modes of life of the inhabitants, was, that one portion were supplied with water of good quality, drawn from a point high up the Thames; while the other portion were supplied with water drawn from a lower point of the river, where it was profusely contaminated with town-drainage. It proved, upon inquiry, that the mortality among the former portion was 37 in 10,000, while among the other portion it was 130 in 10,000, or three-and-a-half times as great as in those houses supplied with the better water. Further inquiry showed that in the epidemic of 1848-49 the mortality was uniform throughout the district. There was no such difference between the houses supplied with water by the two companies, the mortality being in one case 118, and in the other 125; but at that period both companies drew their water from nearly the same part of the Thames, low down, where it was contaminated with town-drainage.

The method of purification proposed by Dr. Clark not only effects the separation of carbonate of lime, which as regards the wholesomeness of water is of secondary importance, but it also separates organic substance. At the print works, in Manchester, it is applied specially for this purpose,

and in an experiment made upon 3,000,000 gallons at the Chelsea Water Works it is stated by Dr. Miller that the amount of organic substance was reduced to one-third.

Some doubt was expressed by speakers who took part in the discussion as to whether the organic substance removed by liming was that suspended or that in solution. Both are in fact removed, but it does not appear that there are any grounds for regarding the one more prejudicial to health than the other.

The removal from water of the carbonate of lime dissolved by carbonic acid, has also, indirectly, an influence upon the contamination with organic substance, by serving as a preventive of vegetation, and of the consequent development of animal organism.

When chalk spring water is pumped up from a well and exposed to light and air, in a clean glass vessel, capable of holding a few gallons, with a glass covering, and so exposed that the changes can be observed as they take place from day to day, it will be seen that all around the sides and bottom a green vegetation will appear in summer time within a few days. In process of time this vegetation tends to a brown, and if a close observation be made, a slight incrustation may be discovered, partly to float on the surface of the water, and partly to adhere to the sides and bottom of the vessel. This incrustation consists of carbonate of lime, slowly precipitated from the water by the separation of the duplicate dose of carbonic acid that kept the carbonate of lime dissolved. It is this carbonic acid that serves as the food of plants, furnishing carbon to them, and the carbonate of lime that was kept in solution by it forms the mineral part of the incrustation. If the glass vessel, after having been exposed as described for several weeks, be emptied, a dirty brownish incrustation, including vegetable substance, may be very well seen, all down the sides, and on the bottom. This brownish incrustation has a strong, offensive, marshy smell. If side by side with the spring water there be exposed, in a similar glass vessel, the same water, previously softened, the softened water will continue for weeks and months unaltered, while that unsoftened water is becoming more and more contaminated by vegetation.

So long back as 1851, the commissioners appointed to report on the quality of the water supplied to London, remarked, that "it appeared to be only a question of time, when the sense of the violation of the river purity (by town drainage) would decide the public mind to the entire abandonment of the Thames as a source of supply, unless artificial means of purification were devised and applied." They also stated, "that a careful series of experiments left no doubt in their minds that the means of conducting this process are certain in their results, and sufficiently simple to be left to the execution of a workman of ordinary intelligence, that the process falls easily into the routine operations of water-works \* \* \* is not attended with any peculiar difficulty on the large scale, and that the softening of Thames water in its ordinary condition by this process is perfectly practicable, at a cost which would, on the average, increase the price charged to the consumer only four per cent."

Nevertheless, there is only one instance in which this process has been applied to the purification of water supplied for general purposes. At the Plumstead Water-Works, near Woolwich, it has been in successful operation for the last year and a half. The water supplied by this Company

is derived from the chalk by boring, and has about twenty degrees hardness, which is reduced to eight degrees by liming. The works are capable of supplying 600,000 gallons daily, and at the present time about 3,000 houses are supplied.

Eight months after the Plumstead Water Company had been carrying on the softening process with success, and much to the satisfaction of the consumers, it occurred to the company to try how far the consumers would continue to be satisfied with the water, if the softening process were omitted.

The consequence was, that by the twelfth day the surface of the unsoftened water in the reservoirs, though daily renewed, was covered with masses of *confervæ* to such an extent, that scarce a square inch could be found clear, and a powerful stench of decaying vegetable substance was evolved. Complaints of the water soon followed, and the experiment was discontinued.

In the course of the discussion, Mr. Braithwaite put forward objections to the application of Dr. Clark's method of purification, on the ground that a certain amount of lime was necessary for maintaining the functions of animal life, and cited, in support of his argument, experiments made by Liebig, upon pigeons and cows. But, the quantity of lime supplied in solid food is much more than adequate to these requirements; in many districts, the water consumed by large populations, and by great numbers of cattle, is soft with a very small amount of lime in any state; and further, the lime salt, required for the formation of bone, is not carbonate, but phosphate of lime, which is never present in water to more than an infinitesimal amount. Moreover, the experiments cited by Mr. Braithwaite are quite inapplicable to the case in question, because, in those experiments, lime was entirely abstracted from the solid food, as well as from the water supplied to the animals.—*London Pharmaceutical Journal*.

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*On the Pathology of Hooping Cough.*—After enumerating some of the many discrepant and imaginative theories of the nature of hooping cough that writers on the subject had indulged in, the author stated, in answer to the question, To what category of derangements do the most constant and characteristic features of the disease the most intimately unite it?—that, in his opinion, it was to the contagious fevers—to those diseases which consist of the assumption into the body of some specific *materies morbi* introduced from without, and undergoing a certain process of self-multiplication within the system—to the zymotic diseases; in fact, in favor of this view, he said, there was this threefold evidence:

1st.—That hooping cough was contagious.

2d.—That it runs a definite course, having certain premonitory signs: certain phenomena when the disease has attained its height, and certain sequelæ.

3d. That it is self-prophylactic; a person having had it once, does not have it again.

Now the three circumstances—contagion, definite course, and self-prophylaxis, are, he maintained, *par excellence*, the three characteristic circumstances of the contagious fevers, and the possession by any disease of these three features would always be, to him, a sufficient warrant for its admission into that family of disorders. The author then thus stated, in



more exact terms, his views: That the catching of whooping cough depends upon the inoculation of the system with a specific poison; that this poison chooses for itself a certain eliminatory surface as its emunctory; that the surface that it so chooses is the respiratory tract of the mucous membrane, from the conjunctiva to the ultimate bronchial tubes, although the whole of the tract need not be involved in every case; that its material presence gives rise to an exalted sensibility and inflammation of the part; and that the exalted sensibility and inflammation constitute the proximate cause of the specific symptoms. The author's conviction of the correctness of the above theory was based on the following considerations:

a. The premonitory symptoms of catarrh, injection of the eyes, coryza, &c.

b. The symptoms of vascular disturbance of the trachea, bronchial tubes, large and small, down even, in many cases, to the ultimate lung structure, that generally accompany or follow the cough.

c. The intermediate position in regard to time, of the laryngeal, between the nasal and the bronchial symptoms, implying a creeping down of the condition of the mucous membrane in a regular course.

d. The power which one child will have, who does not hoop, of communicating the disease to another who will; showing that the spasmodic part of the affection is non-essential.

e. The eliminatory power of the surface, which is consistent with the supposed final cause of its being affected.

f. The support derived from the whole weight of the argument of analogy.

Dr. Salter finished his paper by refuting, in succession, certain objections to his theory, which he could conceive others to make, but which, from our limited space, we are unable to enumerate.

Dr. Richardson believed that whooping cough belonged to the zymotic class of diseases. He advised, that Dr. Salter should ascertain if the mucous is inoculable, and suggested the pig as a fit animal. He had seen pigs with croup, small-pox, measles and plague. Inoculation acts well in modifying disease, by introducing but a very small dose at once, and for the same purpose, it is advantageous to inoculate from matter obtained from animals which had been the subjects of the disease.

Dr. Edward Smith had proved, in a paper published in the "Transactions" of the Royal Medical and Chirurgical Society, that the deaths from whooping-cough were mainly due to bronchitis; but he believed that inflammation was only an accident, and not an essence of the disease. He had doubts as to its being a blood disease, in the sense of being introduced into the system in the form of an organic poison; but, at all events, he considered that the spasm is all that distinguishes it necessarily from a common cough. The secretion is in great part due to the violent spasmodic cough; and the plan of treatment, which in a large experience he had found suitable, was to arrest the spasm, and thereby both the cough and the secretion; so that, in a very short time, the attack is reduced to the condition of a common cough. Since the disease may thus be cut short in probably all uncomplicated cases, and yet not be more liable to return than when allowed to run its course, he could not support the author's theory of elimination of the poison in the secretion of the mucous membrane of the larynx and bronchi. It is, however, just possible that the supposition of the gradual destruction in the system of the poison

might account for the non-recurrence of the disease when thus cut short; but that would be an assumption, and, if true, would render the theory of elimination of no value in practice. He strongly commended the employment of small and increasing doses of morphia, on the plan laid down by him in a paper published in the *Edinburgh Medical Journal* for May.

Dr. Wynn believed that the disease does not run through a regular course. He admitted that it is a contagious disease, but its evidences are mainly nervous.

Dr. Webster remarked upon the difference of opinion existing as to the pathology of the disease. He did not consider it a contagious disease in the sense that measles is contagious, and he did not think it ran through a definite course. It may also recur. It is more common in the winter, and with northerly winds and frosty weather. Change of wind and air are often beneficial. Treatment will often cut short the attack. He believed the disease chiefly affected the head. It is more fatal amongst female young children.

Dr. Camps thought that the author's cases must have been complicated with some inflammatory condition. Mild temperature is beneficial. It does not run a definite course, and treatment may cut it short.

Dr. Radcliffe did not believe in the necessary connection between whooping-cough and true inflammation, and when that complication exists, the hoop is suspended. The disease is capable of being arrested, and hence does not run through a definite course.

Dr. Headland did not agree with the peripheral theory, and thought that the centric theory accounted for the production of the paroxysm. Many poisons do not act upon eliminating parts of the system. He did not approve the *experimentum cruris*.

The author replied.—*Proceedings of the Medical Society of London, in London Lancet.*

#### *On the Dropsy of Pregnancy.* By M. BECQUEREL.

Four forms of dropsy are observed in pregnant women, which are far from being of the same importance.

1. *Mechanical Dropsies*, perhaps the most common, are due to the pressure exerted by the gravid uterus, their production being favored by the lesser density of the blood in pregnant women, and the slight diminution of albumen that exists in its serum. These dropsies are confined to the lower extremities, are of no importance beyond their inconvenience, and disappear after delivery.

2. *Dropsies due to Changes in the Blood, but unaccompanied by Albuminuria*.—The change in the blood which induces these dropsies, consists in a diminution in the amount of the albumen of the serum, a diminution that is sometimes considerable, and for which we can assign no other cause than the fact of the pregnancy, and its influence on the various immediate principles of the blood. This description of dropsy, like the two next, tends to become general. It is of importance to distinguish it from the two others, and especially the 4th, for it does not predispose to eclampsia. It is by analysis of the blood alone that we can establish its existence. It disappears also after pregnancy, but far more slowly. It has been observed that women suffering from it remain feeble for a long period, their "getting up" being slow and difficult.

3. *Dropsies with Changes in the Blood and Albuminuria, but without*

*Bright's Disease, properly so called.*—These dropsies are the consequence of the diminution of the albumen of the blood, produced by its deperdition through the kidney. Until lately it was supposed that such loss might take place without material lesion of the kidney; but from the investigations made by M. Robin and the author, it results that this albuminuria is due to a special modification taking place in the epithelial cells of the tubuli, a modification consisting in the infiltration of the cells and tubuli by numerous granules of a proteric nature. This infiltration is analogous to that which M. Robin had already found in choleraic albuminuria, and like it is susceptible of cure. The absolute diagnosis during life of this disease from Bright's affection is very difficult, and yet it is highly important, as the prognosis must be entirely based upon it. It is in women who are the subjects of these dropsies that we have to fear eclampsia, and the predisposition to puerperal peritonitis. Eclampsia, is not, however, a necessary consequence; and when we find general dropsy, change in the blood, and albuminuria co-existing, we still cannot affirm that this terrible accident will follow. On the other hand, whenever we find eclampsia we are certain of finding, not only dropsy, but albuminous urine, and change in the blood. In respect to the termination of this form of dropsy it may be observed, that if eclampsia does not supervene, a cure is almost certain, while, in the case of its occurring the result is dependent upon that of the eclampsia.

4. *Dropsies due to Bright's Disease.*—It is very important to establish the diagnosis of this form. We may lay stress upon the somewhat larger quantity of albumen, the presence of fragments of the tubuli, of fibrinous filaments, and fatty globules. When eclampsia complicates this form it is invariably fatal; and even when eclampsia does not occur, the disease is not arrested after delivery. The dropsy continues to increase, the termination proving, after a certain period, fatal.—*London Medical Times, from Rev. Medico-Chirurgicale.*

*On the Treatment of Hæmoptysis.* By M. ARAN.—M. Aran agrees with those who entirely condemn the employment of blood-letting in the treatment of hæmoptysis, as it only temporarily arrests the bleeding, while it is dangerous, owing to the debility, and increased susceptibility to the intercurrent affections it gives rise to. He has, for some time past, been engaged in testing the efficacy of the various hæmostatic agents employed in hæmoptysis; and in this paper he gives the results of his observations. He considers the essence of turpentine a most valuable remedy, given in doses of from 10 to 30 drops every hour, either in a spoonful of water, or mixed up with magnesia, as a bolus. Marked amendment usually occurs in a few hours, and in from twenty-four to thirty-six hours the bleeding ceases. It is less suitable for young or plethoric subjects with febrile action, than in weak cachectic individuals, exhibiting a tonic characteristics. Ergot of rye and ergotine are far less efficacious; but chloride of sodium, given in doses of 1 to 2½ drachms, proves very efficacious in some cases, and has the advantage of being always at hand. Among the astringents, tannin, and especially gallic acid, are to be recommended; the latter, while quite as efficacious, does not exert the same dessicating effect upon the tissues, or induce the obstinate constipation produced by tannin. As a mean dose, M. Aran gives 15 centigrammes (a centigramme is 1-7th of a grain) every hour or alternative hour. He has had

little experience in the use of emetic and nauseating remedies; but in three cases in which veratrine was employed, the bleeding ceased as if by enchantment. This class of remedies, indeed, would deserve to stand in the first class of hæmostatic agents, were there not others possessing like efficacy, and yet not giving rise to the painful nausea these produce. M. Aran has derived great advantage from the combined use of digitalis and nitre. In ordinary cases, he gives in the twenty-four hours, 30 centigrammes of digitalis, and  $1\frac{1}{2}$  gramme (a gramme is 15 grains) of nitre, divided into four doses; but in very severe cases, these doses may be very much increased, so that the digitalis has been given to the extent of  $1\frac{1}{2}$  gramme, and the nitre to four grammes, without injuriously affecting the action of the heart, while the effect produced on the hemorrhage has been remarkable. Its arrest never, however, takes place so suddenly, under the use of these medicines, as when turpentine or gallic acid is employed.

In abundant, but not immediately dangerous hemorrhage, we can choose among any of the above-mentioned means. In extremely abundant hemorrhage, we must arrest the flow as speedily as possible, by agents which do not depress the powers of the economy too much, and which are not too slow in their operation. Neither ergot, acetate of lead, nor alum, is sufficient to meet the danger. Turpentine, gallic acid, chloride of sodium, or nitre with digitalis, can alone be trusted; but the necessity of increasing the dose, with the intensity of the hemorrhage, may perhaps render the chloride of sodium, and especially the nitre and digitalis, dangerous, through the possibility of the production of a too great depression of the heart's action. It is, therefore, to gallic acid, or turpentine, that we must chiefly trust in these severe cases; and we must not limit ourselves to their employment, but also endeavor to procure a temporary arrest of the hemorrhage by ligatures to the limbs, and the application of ice to the chest, allowing the means employed internally to consolidate this temporary cure.—*Med. Times and Gaz.*, Jan., 1856, *from Gaz. Hop.*, 1855.

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# A T L A N T A

## Medical and Surgical Journal.

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### ORIGINAL COMMUNICATIONS.

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#### ARTICLE I.

*An Address before the Graduating Class of the Atlanta Medical College.* By HON. JOHN L. HARRIS, of Atlanta, Ga.

*Gentlemen of the Graduating Class :*

I have been deputed by the Faculty to address you at this time. An hour of mingled congratulations and regret: congratulations, because, so far as your collegiate course is concerned, your duties have been accomplished, and your labors finished in a manner honorable to yourselves and highly gratifying to your professors; of regret, because the pleasant and interesting relation which has so long existed between you and them, rendered doubly pleasant by your docility, intelligence and gentlemanly deportment, this day determines.

And, gentlemen, permit me to add to this, the regrets of a community to which your singularly unexceptionable course has endeared you. You, this day, no longer aided by the wisdom and experience with which years and labor have endowed your professors, are called upon to answer to the roll call of your names on the stage of human action, and to take your position as actors in scenes which determine only with life. To us and to you this is a deeply interesting occasion. While we, tempered by age and experience, indulge a well founded and rational hope of your future success and usefulness, your souls are filled with the light of youthful and holy enthusiasm, that throws its roseate hue over coming events.

Beautiful, gloriously beautiful, is the high aspiration of a young heart, when with an eye of faith and hope fixed steadily on the star of honor, which gleams in the temple of Fame, with firm pace and brave soul, it addresses itself to the labor of the ascent.

Such noble impulses I read this day in the light of your eyes. You are full of hope. Standing, as you do, upon the threshold of practical life, it may not be deemed inappropriate to discuss some of the means by which future eminence may be obtained.

Human life is constituted and made up of the ordinary duties, obligations and incidents which, as a general rule, mark the existence of men and communities. Extraordinary events are, as the term imports, departures from the ordinary routine of life.

In forming your plans for the future, then, indulge in no wild dreams of critical convulsions and marvelous events, in which your talents shall blaze forth with meteoric ray. But calmly survey the field of enterprise that stretches itself out before your gaze, and promptly address yourself to each duty that may exact your attention. Labor and perseverance must underlie the structure designed for permanent usefulness. Solid and lasting materials must compose it.

The ice-built palaces of the Empress Catharine, the "imperial mistress of the fur clad Russ," were, as history reports, of exceeding magnificence and wondrous beauty; but they fell under the summer heat. Their materials were not enduring; they were as perishable in substance as they were glittering in aspect. *Omnia vincit labor*—a trite quotation, but the true index of the great Latin poet's success. Under the civil war which had desolated Rome, Virgil lost his meagre patrimony. Donations of lands to the soldiery, made the humble tenants of the soil homeless and houseless. Among the destitute and wretched, Virgil went to Rome to seek friends in that city to encourage and aid him. His poetic talents soon attracted the attention of his countrymen, and the first rude step was laid to be one in a series which carried him up the "steep where fame's proud temple shines afar." Untiring energy, and well directed labor achieved for him a crown of fadeless laurel. He developed, illustrated and adorned the language of his na-

tive land. He wrote of flocks and herds, and charmed by the beauty of his language, and purity of his thoughts, the romantic youths of old Rome sighed for the shepherd's crook. He sung of arms, and a noble military enthusiasm was infused into the hearts of his countrymen. The little bee emblem of industry challenged his muse; and became poetic. He well said, "*In tenui labor, at tenuis non gloria.*" Labor is indeed and in truth the only certain mode of acquiring honorable distinction. And peculiarly so in what are known as the learned professions—such as medicine and law. The experience and wisdom of the great in each of these professions, expositions of abstruse and doubtful learning, analysis and comparisons of existing facts to demonstrate unknown truths, present their ponderous volumes, and demand investigation. Here labor meets you, young gentlemen, and challenges application. You read and ponder upon what has been, that you may, by comparison, determine that which presents itself to you in doubtful aspect.

The collegiate course through which you have gone, is, indeed, but a formal introduction into your profession. The knowledge which you have here acquired, is but a mastery of elementary principles, by a skillful application of which, you can move on successfully and happily in the great field of science. He who believes that the possession of a diploma will constitute him a physician, or the having a license make him a lawyer, is sadly deceived. These are mere preliminaries to the battle of life—the buckling on of the armor, sword and spurs to the unfledged knight.

The future must demonstrate your right to the title in its broad and noble sense. One word here: be not deceived nor mislead by the influence of hope. You, in the discharge of your professional duties, must meet with casualties which will throw a temporary gloom over your feelings; if not, your lives will be miracles.

You must lose patients in your practice. Human wisdom and learning cannot avert divine decrees. When the race of life is run, mortal skill will be found unavailing to prolong its career. But, under all circumstances, in every instance, have the assurance of your minds and hearts, that you have done all "that does become a man; who dares do more is none."

Your convictions, honest convictions, of having done your whole duty, will support and sustain you even when casualties tread upon each other's heels in the practice of your profession. And, therefore, be not discouraged nor dismayed by accident, but press forward in the pathway of duty. The lawyer who never lost a case, and the physician who has never lost a patient, must, indeed, be of very limited practice.

Your duties are singularly interesting and impressive in their character, and your relations to your patients of the most intimate kind. The delicate machinery of this complex system is committed to your prudence and skill to correct its aberrations, and to repair its breaches. Here is to be exercised that knowledge which you have already acquired, and that which you shall hereafter acquire. The system is disarranged, disorganized. To apply the remedy, you must know the evil; to discover the existing cause of mischief, you must know well the condition of the several parts and members of the system when in a state of harmony and repose. Your collegiate course and accompanying investigations and studies have imparted this necessary knowledge. It is for you, hereafter, to examine and determine each case submitted to you according to the rules and principles in which you have been instructed. And, thus, with necessary knowledge and a firm purpose, you will take your position in society.

The life of a physician is free from the turmoil and strife which marks that of the statesman or warrior. Yours is an humble but a happier and holier relation. You penetrate to the hearth-stones of your patients and friends, and are, in danger's hours, the rock under whose shadow they repose. A loved one is stricken down—a winged messenger flies to summon you to the scene of misery and woe: see with what intense agony the weeping watchers note the expression of your countenance as you examine your patient. You are now their judge. They await in voiceless suspense an intimation of your opinion. What is all this world to a mother, as she watches the convulsive twitches of her infant's limbs, and awaits your utterance in almost hopeless despair? These are hours and scenes that try men's souls. Every thing now rests with you; you feel the terrible responsibility which is upon you, and will, we doubt not, address yourselves like men to your tasks.



Again, you will, unless singularly fortunate, be called upon to expose your life to death, when it rides upon the breath of the pestilence. Others may seek safety in flight; the mother may desert her offspring; the husband fly from his wife, as was done in the streets of London, in the days of the plague; but you, young gentlemen, must face the storm of death. Your persons must be exposed to every hazard. Your cheeks may grow pale, but your hearts must be firm. The path of duty is plain before you, and your profession enjoins on you to pursue it. You must be martyrs for humanity, if God so wills it. Such is the high responsibility of your noble profession. How different the scenes under which you are called upon to meet not only death, but loathsome and lingering disease, from those which surround the soldier as he faces his foe.

On the battle field we have the "spirit stirring drum, the ear piercing fife," the bugle's martial blast, waving banners, and all the pomp and circumstance of war which would make even the timid take heart of grace, and plunge into the fight. But reverse the picture; see the physician, wearied and worn under the protracted labors incident to the prevalence of a scourge like yellow fever or cholera. He staggers home to repose his sinking frame, and refresh his wearied limbs. There stands a messenger, with faltering tongue and palid lip, he whispers, come, come! Almost exhausted, the physician would fain excuse himself. "An hour's respite and he will go." The messenger, like the importunate widow, will take no denial. With trembling finger he points to the habitation of squalid poverty and want, where death holds his grim carnival. Those pallid lips once more unclose, "My wife and children are stricken, come." Gold cannot buy what charity gives. The physician follows him to the scene of woe—God shield the poor pilgrim on thy perilous errand—they arrive at the threshold. Hush! on stealthy toe, and with cat-like tread, see him as he creeps firmly into the very jaws of death; the choked atmosphere is charged with disease. See him as he bends over his patient, administer what skill prescribes—encourages with words of hope, and once more, fainting and exhausted, emerges into the open air.

This, young gentlemen, is courage—the highest of all courage—moral courage—the firmness of Latimer and Redly

among the flames. Here is the high, noble self-sacrifice which duty may call on you to offer. Here is whence the light emanate, which sheds its halo around the true physician's head. It is among such scenes as these, when plagues visit our people, that we expect noble achievements by you in the cause of medical science and humanity. Hence, this is a deeply interesting occasion to us and to you.

Again, we shall watch your course with deep anxiety, being the graduates of a young college, now taking proud position with her sister colleges. We have the fullest confidence in you. We are glad that the present character of our college is committed to such worthy hands. Not one shadow dims the brightness of our hope for you, and, through you, this young institution. You will be pointed at, and known as graduates of the Atlanta Medical College; *your* destiny is *hers*; *she* is willing to risk her character in *your* hands. Will you accept the trust? You will meet moustached gentry fresh from Philadelphia or Paris, who may sneer at the graduate of an up-country college. I pray you be not troubled; the first rude blast which passes will sweep away these gossamers: they have mistaken their calling; they may make fancy doctors for a ball room, to pour balm of a thousand flowers upon some fainting lady's lips. The true physician is made of sterner stuff. To be a physician, it is necessary to be a *man*: I use the term in its broadest, noblest sense. We rejoice, young gentlemen, that you have chosen to complete your course, and graduate at your college.

The establishment of a college here was, to some extent, a work of necessity, and certainly of enlightened patriotism, occupying a central position, as Atlanta does in some degree, to the whole State, and certainly to more than half its voters. It was right and proper, that the up-country of Georgia should not longer be subordinated to the interests of the South and East. But to avoid all misconstruction, to shun even the appearance of a collision in interest, or a want of harmony in action at home, it was thought proper to establish a course of summer lectures, and, by this means, supply a desideratum long wanted in the South. Southern gentlemen may now, upon a Southern soil, in a Southern college, attend a course of summer lectures. Do not misconstrue me. I have no hos-

tility to Northern institutions; but I do depreciate that spirit of servile dependence which has so long hung like an incubus upon the South, draining her resources, and dishonoring her character. It was a want universally felt and acknowledged. The establishment of this college was intended to supply this deficiency in the South. Its past and present position is flattering indeed; and we feel that we might safely predict for it a career of unprecedented glory and success. It ought to be, and must be, from its peculiar character, the recipient of unexampled patronage. Southern men, every where, alive to the true interests of our people, will encourage and adopt this institution as the foster child of the South. They have watched with painful solicitude, the faint pulsations of the new born infant. They see that there is life; its limbs are acquiring strength and activity, and it is perfect in all, save the length of its arms. In this particular, it is truly a little monster; for its arms will reach from the wave-lashed shore of the Chesapeake to the everglades of Florida. Truly, men did prophecy evil things concerning it, but they, who with mocking tongue and sneering lip, predicted evil, declaring it would prove a failure, an abortion, furnish but one more striking illustration of the prophet's truth: "Their young men shall see visions, and their old men dream dreams." It is of strong and sturdy growth, and rising in power, has dismayed and crushed out its enemies, even as the infant Hercules strangled the serpent. Its course is upward and onward—going on conquering and to conquer. It has taken root in the heart of the people. Its friends are multiplying every where, and every thing indicates a glorious future.

You, young gentlemen, are graduates of this institution; she is proud of her sons. Like the Spartan mother, she gives you your arms to-day, with the injunction, "return with them, or upon them." You are armed for the conflict of earth; the world lies before you. Henceforth, you are the architects of your own fate.

"In the world's broad field of battle,  
In the bivouac of life,  
Be not like dumb driven cattle,  
But be Heroes in the strife.  
Trust no future, however pleasant,  
Let the dead past bury the dead!  
Act—act in the living present,  
Heart within, and God o'er head,

## ARTICLE II.

*Operation for Hare-Lip.* By ISHAM H. RAGAN, M. D., of Lithonia, Georgia.

I was requested to operate for hare-lip on the child of Mr. J. C., of this county, aged about fifteen months. It had a single fissure on the left side, extending to the nostril; the left side of the superior maxillary bone being shorter and smaller than that of the opposite side. I first thought of adopting M. Nelaton's plan, as performed by Prof. Westmoreland, of Atlanta, and reported in the Nashville Journal of Medicine and Surgery, of February, 1855. Where this plan is practicable, it seems to have the advantage of most of others in many respects, especially in preventing the deformity (a notch or depression) so common after operations for hare-lip. But finding that there was not sufficient space between the angle of the fissure and the nose to make a continuous flap, I then determined to perform the operation according to the proposition of M. Malgaigne: that is, to fill the depression in the lip by two flaps made by two incisions, one on each side, commencing at the top of the fissure, and extending to within three lines of the border of the lip. These flaps are then reversed so as to bring the raw surfaces together, thus forming a projection below the border of the lip.

On the 9th of May last, assisted by some professional friends, I performed the operation according to the above plan. After making the incisions, I found that the textures were so closely adherent to the bone, that the opposite borders of the fissure could not be well adjusted without first slightly separating the lips from the bone, which I did with the point of the knife. Then, after bringing the flaps down, I brought the borders of the fissure together, and secured them by means of two silver pins, and secured the edges of the flaps with stitches. I then applied an adhesive strip between the two pins to extend from one cheek to the other, so that in crying or laughing, there would be less strain on the pins. I then gave directions to keep the child quiet, and should fever supervene, to use cold water freely to the wound.

On the 11th, I saw the child again, and found it doing very

well; had had no fever of consequence. I took out the pins, and applied adhesive strips, letting the one applied the day of the operation remain. I saw it again in a few days, and found that it had adhered, leaving a very narrow cicatrix and a projection below the border of the lip of about two lines. Thinking the projection would remain too large, I drew a ligature around it so as to take off about one-third; and after the ligature had remained about twenty-four hours, I clipped it off with the scissors. The projection is now about one line in length, and seems to be gradually growing shorter. It will, perhaps, finally shrink away, so as not to be observable. It even now gives the lip a much more respectable appearance than a notch or depression would.

Should the projection still remain, after waiting sufficiently long for it to shrink away, I will then clip it off with the scissors.

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### ARTICLE III.

*Pumpkin Seed as a Tæniacuge.* By JOHN W. JONES, M. D., of  
Atlanta, Georgia.

As the therapeutical properties of each and all the articles that compose the Materia Medica can only be fully ascertained by repeated experiment and observation; and as it is the duty of every physician to make known to the profession any and all facts of which he may be cognizant, (however minor in character they may appear,) and especially those which lead to practical utility; and as the discovery of a remedy is not alone sufficient to establish its reputation and ensure its general employment, I am therefore induced to contribute the mite contained in the following communication:

“Having seen in the journals of several past years, authentic accounts of the successful employment of the seed of the cucurbita pepo for the expulsion of that genus of intestinal worms denominated Tænia, and being aware of the difficulty that had hitherto attended their speedy and safe removal, I at once became anxious for an opportunity to test the merits of

this recently discovered remedy; but which did not present itself until the autumn of 1853. About that period, I was consulted by Mrs. D—, a very intelligent and amiable lady of Montgomery county, Alabama, who informed me that she had suffered long and much from the presence of a Tape worm. Her appearance but too plainly indicated the reality of her statements. She had no doubt of the existence of the parasite in her case, for in addition to other symptoms, she had several times discharged small portions of it, from which, however, her sufferings did not materially abate. She, together with her numerous friends, had pretty well despaired of her recovery. Many remedies had been resorted to, and some of quite a potent character. Among those she mentioned, were a protracted system of semi-station and hydropathy, in all its forms. Remembering the flattering accounts given of the new remedy in the then recent journals, and more particularly that from the pen of Prof. Henry S. Patterson, M. D., in which he says: "in the Medical Examiner for October 1852, I reported a case of radical cure of *tænia*, by the use of an emulsion of pompon seed, after Ol Terebenth and even Kousso had signally failed. Several other cases have been reported both before and since mine, all going to establish the efficacy of this new remedy. Should it prove as generally successful in expelling the worm as the cases indicate, it will become a valuable accession to our means of treatment in a troublesome and obstinate affection." I say, influenced by this and other similar reports, I advised a strong decoction of the pumpkin seed, with special directions as to the manner of its preparation and administration. The patient left me somewhat encouraged, and with a promise forthwith to try the prescription. But it was not until January thereafter that she used the remedy. When quite unexpectedly, and to the great joy of herself, husband and friends, she discharged an entire Tape worm, more than 20 feet in length, from which time she gradually improved, and is now enjoying good health.

The author just quoted, says, "the seed of the common pompon consist of a leathery white envelope, enclosing an oily albumen of a slightly greenish tinge. They are modorous and have a sweetish mucilaginous taste. Rubbed up with warm water or milk, and sweetened, they form a very pleas-

ant emulsion ; and this is the way in which they have generally been administered. They abound in fixed oil, which is readily yielded on expression, and appears to be the only constituent of any importance. Conceiving this oil to be the anthelmintic principle, I determined to use it in the first case of tænia I should encounter.”

H.

When Prof. Patterson made this communication, he had not used this oil as a tæniafuge, as will be perceived by his remarks on this subject, but informs us that Mr. John C. Lyons, then a medical student residing near Kensington, Pennsylvania, had used it in a case with the “happiest result.” Mr. Lyons gave half an ounce of the oil as a dose, and repeated it in two hours, and then followed it with castor oil.

The remedy may be prepared and used as follows: Take half a pound of the seed well bruised, and three pints of water, and reduce the mixture by means of a gentle heat to a pint and a half. Then strain the liquid from the seed, and give a wine glassful of the former (or more if the stomach will retain it) every four or six hours, until some six draughts are taken, to be succeeded by some brisk cathartic. The patient should eat sparingly, or fast, for some twelve or twenty-four hours prior to, and while using the decoction.

The testimony that has already accumulated in favor of this remedy, warrants the conclusion that it is at least among, if not the most prompt, safe and reliable means now known for the expulsion of tænia. It is a fact long since well known to the profession generally, that the oleum terebinthina and the bark of the root of the *Punica Granatum* would each frequently expel the tape worm from the intestines; nevertheless, they are, in some respects, objectionable. The former, in small doses, is apt to produce severe strangury, and in larger quantities, giddiness, intoxication, &c.; and the latter article, in full doses, often gives rise to vertigo, abdominal pains and other disagreeable sensations. With the lights before us, we would therefore recommend the cucurbita pepo in preference to the former, and to all other remedies for the expulsion of tænia. The infrequency of such cases renders it measurably impracticable for any one practitioner to make all the necessary observations upon this article, in the treatment of this distressing affection; and hence the propriety of congregating

the isolated experience of many as to its merits or demerits. Whether it will prove equally efficacious in removing other varieties of worms from the alimentary canal, is a question yet to be determined.

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## ARTICLE IV.

*On Small Pox.* By N. F. POWERS, M. D.

It is highly important for the advancement of medical science that many facts of the present should be gathered together, so as to serve as data from which generalizations may be made, and inferences drawn, so as to form a basis for scientific remedial treatment.

Having attended, since March, 1849, several epidemics of Small Pox in the State of Georgia, I have concluded to write some of my notions in reference to this loathsome disease. Not that I have been a discoverer, or would put upon wing some new fledged notion, or give birth to a wild theory to be only the "vision of an hour," but only that I may render up a gift on the altar of my profession, and awaken the minds of practitioners to the subject under consideration.

Small Pox, or Varioloid, is an acute inflammation of the skin and mucous membranes. Cullen classifies it among the Pyrexiae, and order exanthemata. Many contend that it was known to the ancients; that Job and the Egyptians suffered much from boils in the early ages of the world, and that even anterior to Job's day, (though no one knows when that was,) those very ancient people, the Chinese, had the Small Pox. But others say that no intelligible account is given of it before the sixth century, and that Razes, an Arabian, about the close of the ninth century, was the first professional writer who noticed this disease.

It was universally confounded with Rubeola, until the great Sydenham pointed out their diagnostic symptoms, and divided this disease into the discreet and confluent—which terms are very significant of the intensity of the disease, but there is no specific difference in the origin of the two. The one is de-



nominated confluent, because the pustules run together; the other, discreet, because they do not coalesce.

The history of this disease may be given under four heads, or different stages—1st. The stage of incubation. 2d. That of the eruptive fever. 3d. That of maturation. 4th. That of decline and desquamation.

The period of incubation—This is the time which classes between the exposure to the virus of Small Pox, and the time of the supervention of the eruptive fever. It may be called the latent period of the disease, as the virus remains hidden in the system, between seven and twenty-one days. In some two hundred noted cases, the period of incubation was fourteen days. This time may be lessened or prolonged by contingent circumstances. The patient enjoys, during this time, an accustomed degree of health. Why the virus remains dominant, inactive, for such a length of time, has never been satisfactorily accounted for by any pathologist.

The eruptive stage—It sets in with a rigor or chill, followed by fever, which continues for some seventy-two hours. The chill comes on suddenly, unexpectedly. In the majority of instances there are no premonitions of disease. During the fever there are pains in the *loins*, bones, in the joints and muscles of the lower extremities, so much so that I have known patients to be treated in the incipency of this disease, for inflammatory rheumatism. There is also pain in the head, which is of the frontal variety. These pains, as in the loins, head, bones, muscles and a furred tongue, whitish in appearance, are prodromous of the disease. Chomel thinks that the lumbago is pathognomonic, and refers it to the kidneys. Indeed the whole glandular system is involved. The kidney secretes urine which is diminished in quantity, but increased in specific gravity—its color is deep red, often albuminous and turbid. The parotid and submaxillary glands are somewhat enlarged, and secrete an unusual quantity of fluid. Large quantities of bile are often vomited from the stomach—the nausea is great, and the emesis persistent—the pulse is full and frequent, varying from 100 to 120 per minute. The heat of the skin is greatly increased, though the temperature is not so great as in scarlatina. The tongue, at the onset, is whitish, and then, as the fever advances, becomes red at the point and edges—a dark fur covers it, and the papilla elevated.

In children, during the eruptive fever, convulsions supervene, which assimilate in many respects the symptoms of epilepsy.

In the course of three days of the eruptive fever, pustules make their appearance on the forehead ; then on the lips. The eruption continues to come out in successive crops until the whole surface is covered in some thirty-six hours. The papules measure from a half to two-thirds of a line in diameter, and resemble flea-bites ; they disappear under pressure. The papules having made their appearance, the nausea and vomiting cease, the fever declines, the pulse becomes natural, full and regular.

The papules about the second day change in appearance—they are more elevated ; their apices contain a small particle of serous fluid, which can be seen soon after the papule is visible by the aid of a magnifying glass. This transparent elevation corresponds to the point of umbilication in the pustule. This point in the papule enables the physician to diagnose the disease, so soon as the eruption makes its appearance. About the second day the papules change into vesicles. The fluid in the vesicles is changed in its severity and becomes opeline, purulent, or in other words, the vesicle is changed into a pustule. When a vesicle is changed to a pustule, which is about the fifth day of the eruption, a distinct areole is formed around its base ; that is, if the pustule is of a healthy character. The pustules in patients who are anemic from any cause, whether it be chlorosis, chronic, or cachectic affections, the pustules are not well filled ; they are pale and flabby ; scarcely any areole visible around their base. Such patients generally die, unless closely attended to, and stimulate when necessary.

Maturation—The pustules, before bursting, become flattened, and are about the size of a half-English pea—their contents are yellowish and purulent. The pustules can be seen in the mouth, nose, on the tongue and in the throat. The mucous membrane is red and thickened, and the tonsils swollen. I have never seen pustules on the mucous membranes of the stomach and intestines, though Rostan asserts that he has found them throughout the intestinal canal. The majority of writers disagree with him. Changes do take place, but these may be embraced under that of “Hayer’s Plagues.”

Pustules are often seen in the corner of the eye, and produce blindness. The pustules are more numerous on the face, hands, feet and buttocks. In children they are also numerous on the inner side of the thighs, from the irritating effects of urine. About this stage the scrotum of the adult being formed with pustules, becomes vesicular, and very much distended.

About this time secondary fever comes on, that is, if the patient be affected with the discreet variety. Sometimes it does not occur, or is not a prominent symptom. In the confluent, instead of appearing on the seventh or eighth day of eruption, it manifests itself about the tenth or eleventh day. It is then often of a lower grade, or typhoid order.

Suppuration is first seen on the face, then on the breast, and lastly, on the feet. The pus often diffuses itself in confluent Small Pox under the skin of the face, so that superficially it is a mass of purulent matter. Previous to this formation, the face and whole body itches; feel hot; the skin is stiff and thick; the eyelids are greatly swollen, and cannot be opened, and hence a lonely feeling comes over the patient, which is most intolerable. The nostrils are shut, full and distended, consequently the patient has to breathe through the gaping mouth, and over the thickly pustulated tongue, which is dry and swollen. The voice is then hoarse; the pharynx and fauces being pustulated. According to Sydenham, if ten thousand pustules be on the entire body, two thousand will be on the face. This numerous pustulation is the cause of the suppuration being so extensive.

The *period* of decline and desquamation—Desiccation commences about the eighth day of eruption, and is manifested by the commencement of the drying up of the pustules, so as to form scales or scabs. The pustules burst, and in drying, their pus forms a dark brown scab. About this period there is an odor which arises from the patient, which is peculiar, fetid, mummy like, and is decidedly characteristic of the disease.

The tumefaction subsides; the appetite returns; the patient eats, from soreness and the distention of mouth, with difficulty. The scabs begin to fall off about the fourteenth day of eruption, and continue until about the twenty-fifth or fortieth day. After the period of desquamation closes, the whole surface of the body, in confluent Small Pox, is covered with a new, ten-

der scarf skin, and sometimes the patient then has to suffer from crops of boils, situated on various parts of the body.

During the period of desquamation in confluent Small Pox, all the hair, sometimes the toe and finger nails, fall off—leaving the patient sans hair, sans nails, sans skin, sans nearly everything but appetite.

**Morbid Anatomy**—The pustules are found on the entire integument, on the mucous membranes about the outlets of the body. The seat of the pustules greatly modifies their umbilications. This cannot be so plainly seen on the face, hands and feet, but nevertheless, the umbilication exists. For if the hand or foot be placed in hot water about the fourth day of the eruption the pustule can be removed entire; when it will resemble a dried disc of mixed pus and blood, with a depression in the center. This depression is the diagnostic symptom of the Small Pox pustule. I have never seen the least difficulty diagnosing the disease, after the eruption had made its appearance, by the use of a magnifying glass. Though I once knew several physicians who made an error in diagnosis, from the fact, that the patient was suffering simultaneously, from Small Pox and Purpura Hæmorrhagica. Each pustule then was filled with blood, but nevertheless, the contents of the original pustule was there and could be seen. In this instance I was guided by scent more than sight.

A well formed pustule is divided into two chambers, a superficial and a deep seated one. The epidermis covers the apices of the pustule, the derm is its base; the false membrane its septum. The two chambers communicate with each other. The surface at the base of the pustule is red and highly vascular. The cause of the umbilication of the pustule, is the attachment of the false membrane to the epiderme.

**Diagnosis**—It is difficult during the incipency of Small Pox, to diagnose it. There is great variety of fevers which resembles it during their onset. Pains in the loins, limbs, head, bones, joints, staggering as in drunkenness, white furred tongue are more common in varioloid than in any other disease. Its eruption resembles some little that of Rubeola, though its papules are more elevated and rougher. After the eruption makes its appearance the difficulty ceases. The transparency on the top of the vesicle—the umbilication of the

pustules are very plain manifestations of Small Pox, and can be seen as other disease.

Prognosis is generally favorable unless the patient is *anæmic*; in the last stages of *pregnancy*, or *very old*.

Irregular forms of the disease are generally fatal, as when complication with diffused hemorrhage, &c.

When the patient is about to die with the disease, the breathing becomes stertorous, the pustules are flattened—white around the base—the blood looks dark under the finger and toe nails; and the shoulders are elevated at each inspiration.

Cause. This is universally acknowledged to be contagion, capable of being propagated by epidemic influences. Some say it is a specific animal poison which can be taken from the dead subject, (as in my own case,) or from the cloths, bed, bedding, from the walls of the sick-room even after the elapse of years.

In testimony of this fact, I will take the privilege of publishing a private letter from one of the oldest and most reliable practitioners of the State. I do not give his name as I am not authorised, but, nevertheless, I feel very thankful to him for his valuable information. He writes me as follows:

"You wish the facts in relation to the recent cases of Small Pox in Mr. Hawkins' family. I was not the attending physician, but Dr. B. V. Willingham who had been attending Mrs. Hawkins for sometime on account of a bad state of general health, when the eruption came out, he (Dr. Willingham) pronounced it Small Pox. I was then called in and concurred in opinion with him. It was a case of Distinct Small Pox, in a mild form, and went through the regular stages. Mrs. Hawkins had never been vaccinated—a negro woman who had been vaccinated, and who waited on Mrs. Hawkins, and slept in the room with her every night, had Varioloid. These were all the cases occurring in the family, so far as I know. Several persons had been to see Mrs. H. before the eruption came out, and some after it made its appearance, but none took it. Mrs. H. must have taken it from the house, or something (I know not what,) about it, as there was no opportunity of getting it otherwise. Mr. H.'s house, or the bed-room, is a log body, weatherboarded and ceiled. In this room the white family, who had Small Pox in 1851, were confined."

## SELECTIONS.

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*An Essay upon the Relation of Bilious and Yellow Fever—prepared at the request of, and read before, the Medical Society of the State of Georgia, at its session held at Macon on the 9th April, 1856. By RICHARD D. ARNOLD, M. D., Professor of the Theory and Practice of Medicine in the Savannah Medical College.*

The subject about to be discussed by me, in compliance with the appointment of the Society, is—THE RELATION OF BILIOUS AND YELLOW FEVER.

At first sight, this may appear to be a question of very little practical utility, and one upon which there is little contrariety of opinion. But when I recollect the change which years and experience have wrought in my own opinions, and when I see taught in medical text-books views so totally dissimilar to those I now entertain on the subject, I have not been unwilling to endeavor to convey to the society what I conceive to be the true relations between Bilious and Yellow fever. In doing so, I shall not pretend to give a history of either Bilious or Yellow fever, nor shall I bring any bibliographical array to support my views: not that I underrate the value of books, for without a proper knowledge of what has been learned and taught before our day, we would be little better than blind mill-horses, constantly pursuing one narrow circuit; but, because the subject is a strictly practical one, which must be decided by the weight of testimony.

Each observer must bring in his mite of observation, add his grain to the mound of true knowledge; "and, as the laborious ant—

———*Trahit quodcunque potest, atque addit acervo  
Quem struit, haud ignara ac non incauta futuri.*"

While Yellow fever has never been known to prevail in climates and localities where Bilious fever was not endemic—Bilious fever, in its most malignant form, is known to prevail where Yellow fever has never been seen. Having practiced for more than twenty-five years in one of those localities where Bilious fever is annually endemic, and Yellow fever only an occasional visitor, I feel that I have been placed in a position which has given me some advantages in treating of this subject. Two opinions have prevailed amongst those who have judged from this fact: first, that Yellow fever, occurring as it does where Bilious fever is endemic, is but a higher grade of the same disease, produced by the same causes, acting in greater intensity; second, that Yellow fever is a disease *sui generis*, having no analogy nor connection with Bilious fever, not produced by any local causes, but *invariably* imported from abroad, therefore to be kept away by quarantines and all their inhuman vexations and costly consequences. I shall proceed to consider these two opinions in their order.

1st. *Is Yellow fever only a higher grade of Bilious fever?*—The first time I ever saw a case of Yellow fever was, while a pupil of the late Dr. Wm. B. Waring, in the summer of 1827. No man in the southern

country was better acquainted with our fevers than he was. He had seen them in various localities while a surgeon in the army ; he had seen them in all their violence in our own city—before the dry culture system, by removing the culture of rice, with its concomitant evils, from under our very door sills, had so favorably modified the type of Bilious fever as met with in the city proper ; he had been through our then recent epidemic of Yellow fever of 1820, from the beginning to the end ; in company with the distinguished Chervin, he had conducted a series of post-mortem examinations of Yellow fever subjects, and he could thus “ speak by the card.” During the fall of 1827, Yellow fever broke out in our city : it did not prevail very extensively ; for, occurring late in the season, its mighty destroyer, frost, put an end to it before it had time to spread extensively.

It was my privilege to conduct all the post-mortem examinations made by my preceptor during that season. Is it any wonder that I should have considered him my medical Gamaliel, and have sat reverently at his foot-stool ? Among the opinions held by my distinguished preceptor was this identical one, that Yellow fever was but a higher grade of Bilious fever. He had imbibed this from *his* preceptor, the celebrated Rush ; it descended in a straight line to me, and many years rolled by before I dared to question its accuracy ; and I did not do so, until repeated observations had given me data on which to base my belief. Such is the power of authority, which too often trammels us in our researches. In fact, in our views of general affairs in this world, of politics, of religion, &c., there are very few who can truly apply as a motto—

“ *Nulius addictus jurare in verba magistri.*”

If Yellow fever were only a higher grade of Bilious fever, we ought to see it “ cropping out,” whenever there was any unusual intensity, or any greater prevalence of the latter.

I have witnessed every epidemic in the city of Savannah, from the year 1830 up to the present time ; I have often known and seen Bilious fever of a malignant congestive type ; for fifteen consecutive summers I was the attending physician of the city hospital, whither the worst cases of our ordinary climate fever are conveyed.

When year after year, I met with malignant and fatal cases of Bilious fever, and yet with not a single one of Yellow fever, I began to doubt whether or not I was right in my opinion. Occasionally a few cases of Yellow fever would occur, at intervals of years ; these I studied with intense interest. From 1830 up to 1839, I never saw a case of Yellow fever in the city. Its characters were indelibly imprinted on my memory from the experience 1827. In 1839, the city of Augusta was ravaged by this scourge : it was denied at the time that Yellow fever prevailed there. In the last of August, a patient, from Augusta, entered the city hospital, and died in a couple of days. My then colleague, Dr. P. M. Kollock, and myself examined the body, and found the unmistakable post-mortem appearances of genuine Yellow fever. A short time afterwards, a patient from Charleston entered, and died, and after death presented the same appearances. It is worthy of recollection, that although these cases were placed in the wards of a hospital filled with Bilious fever patients, there was no propagation of the disease. I still look back upon the year 1839, as the sickliest season I have ever experienced in Savannah, with the exception of our terrible epidemic of 1851. Old in-

habitants will recollect it as the driest summer on record, when turnips were planted in the bed of the Savannah river opposite Augusta. It was also a hot summer. Bilious fever prevailed over the whole country, and in a malignant form. Contrary to what would seem the fact at first view, such a season was peculiarly calculated to generate the malaria which is the generally acknowledged cause of Bilious fever. It is conceded that mere moisture will not produce malaria; but mix vegetable matter with water, and subject it to heat, and the most malignant malaria will be generated. That year, swamps and ponds which had been covered with water since they had been known to the white man, were dried up, and the vegetable *debris* which had been precipitating to their bottom for years and years, were exposed to the action of the sun and air, and consequently were decomposed, and generated malaria. Now, Bilious fever prevailed with great violence in our city from early in July. I cannot imagine more favorable circumstances for the spread of Yellow fever than accompanied the introduction of those two cases in our city. Later in the season, I did meet with several cases of Yellow fever, but they were so few in number that I did not consider them as entitled to be considered epidemic. They were isolated, occurred in different parts of the city, and had not the slightest connection with the cases of the hospital. I considered them sporadic, and they most undoubtedly originated on the spot.

I met with one solitary case of Yellow fever, with black vomit, in the fall of 1840. She was an unacclimated foreign lady, who had not stirred out of the city during the whole summer, nor had she even peeled a banana from Havana.

In March, 1841, a case was brought to the hospital from Demerara, and in October of the same year a case occurred in my private practice, both of which were reported by me in the American Journal of the Medical Sciences for October, 1842.

A few cases occurred at the hospital late in the fall of that year. I found the post-mortem appearances so similar in all the cases I had examined, from 1827 up to this time, that I was convinced that Yellow fever must be a disease *sui generis*. It was with increased interest, that during the summers of 1843, 4, 5, 6, 7, 8, 9, I examined every case of fever which died at the hospital. Neither during life, while attending them, nor after death, did I find any signs to make me ever suspect that Yellow fever had existed. With the exception of a sporadic case in June, 1852, I met with no Yellow fever until the fall of 1852. Late in September, an unacclimated painter was attacked with it in the north-eastern portion of the city: he had been working here all summer, and had no connection with Charleston or Havana. He was removed to the hospital after he had thrown up black vomit, and he died. I had resigned my post as physician there in 1850, and was not attending. An autopsy was made, at which I was present. Before it was done, I stated to the attendants what morbid appearances I expected to see; and they turned out exactly as described beforehand. The fever began to show itself in several places about the middle of October; but, fortunately, a frost early in November cut it short. I examined several subjects who died of it, and found the same peculiar morbid appearances. In 1854, it was my lot again, as in 1852, to have the first Yellow fever patient. I was called in on the night of the 3d August, and he died on the morn-



ing of the 5th, after having discharged quarts of genuine black vomit. My last case of Yellow fever, with black vomit, died on the 27th November. In the intermediate time, I had seen hundreds of cases of genuine Yellow fever.

I had made post-mortem examinations in the beginning, the middle, and the end of our epidemic, under the broiling sun of August, the more temperate atmosphere of the latter end of September and October, and the almost cool temperature of November, and I found nothing new. From the beginning to the end, I found the same morbid appearances. Of course I do not mean that each case was an exact copy of the other; but just as all cases of genuine Typhoid fever present the same morbid appearances, although the patches of Peyer may be more ulcerated in one case than in the other, or in some cases they may be enlarged without being ulcerated.

Now, the morbid appearances after Bilious fever have never, in my experience, approximated those after Yellow fever; and the symptoms during life have presented wide and marked differences. Let us devote a little attention to these two conditions.

It is well known that all fevers have many symptoms in common in their beginning, such as headache, lassitude, pain in the limbs, &c.; and that merely from such symptoms it would be impossible for the most experienced and skilful practitioner to diagnosticate the particular kind of fever presented to him. He must wait the progress of the case, and the development of the characteristic symptoms, before he can decide. Of course I speak of the inception of the disease. Certain fevers come on, as a general rule, more suddenly than others; but the rule is not invariable, and we would be at a loss to make a correct decision if we depended merely on the first phenomena of febrile disturbance.

Moreover, some cases of well-known specific exanthematous diseases are developed so imperfectly that we are at a loss to decide, positively, whether or not the patient has had the genuine disease. Every practitioner of any experience must have met with such cases of Scarlet fever and Measles. Yet no one has ever, in latter days, denied that they are distinct and peculiar diseases, although a little more than a century ago Measles was confounded with Small-pox.

I do not deny that, when no suspicion is aroused, sometimes the first notice the physician has that he is treating a case of Yellow fever, is the appearance of the fatal black vomit. But even in epidemics of Yellow fever, black vomit often supervenes when the patient has apparently passed the point of danger and offered no untoward symptoms.

Nor must it be supposed that all cases of genuine Yellow fever appeared in one stereotyped edition. There was every variety of grade and intensity, from the ephemeral attack of twelve hours of fever, followed by speedy convalescence, to the more prolonged paroxysm of seventy-two hours, ushering in a malignant or a fatal case. Yellow fever is essentially a fever of one paroxysm; but that paroxysm is of very unequal duration, as just intimated. Now, if the access of fever should not be very marked, it could not be distinguished at first. Again: there are some cases which are ushered in with such marked symptoms that your suspicions would be at once aroused. The first case with which I met, in 1854, was one of this nature. There had been no unusual severity in the fevers which had occurred up to that time. The summer had been the

very hottest I had ever experienced, and what is very rare many fatal cases of *coup de soleil* had occurred. I was called to see my patient at night (3d of August); he had taken comp. blue pill: he offered the usual symptoms of fever—pain in the head, in the loins, over the upper part of the sacrum, down the thighs; a hot, dry skin, and accelerated pulse. I directed a demulcent drink, and that a dose of castor oil should be administered the next morning early. On my visit the next morning, I found him with a raging fever; intense headache; blood-shot, shining, watery, smoke-affected eyes; a full, bounding, but not very frequent pulse; a constant retching, and quite delirious. The landlady said to me, "Doctor, what kind of a fever is this?" I replied, "It is first-cousin to Yellow fever." I bled him, and applied a blister to the epigastrium, and directed cold demulcent drinks. The fever continued unabated all that day and the ensuing night. On the morning of the 5th of August, on my visit, they showed me a large wash-hand basin filled with matter, which I pronounced black vomit. He continued to eject large quantities of it, and at noon he died. This man was a carpenter by trade, a northerner; it was his first summer south; he had been working on the roof of house which was just finishing, and before he had moved to the place where he was then boarding, had lived in Curry town, the extreme south-western portion of the city, and had walked nearly a mile two or three times daily to and from his work, which was in the north-eastern portion of the city, through the broiling sun. It is again to be noticed that not a single other death occurred in that house during the season. After the epidemic became a fixed fact, and cases had occurred all over that section of the city, two of the inmates had the fever, but it was in a mild form. There was not any loop-hole whereon to hang even a suspicion that this man's disease had been contracted any where out of the limits of the city—no "low, long, black-hulled schooner" had just arrived from the West Indies to afford an easy solution of how Yellow fever had attacked a denizen of Savannah. The house was a mechanics' boarding-house. A great panic ensued; but I am yet to learn that any boarder contracted the disease from this case.

The next afternoon, the 6th August, I was called by Dr. Jas. B. Read to see a case on the extreme eastern edge of the city, many squares distant from the first case. The patient was a young German girl, entirely unacclimated; the house where she lay was on the eastern bluff of the city, overlooking the low swampy grounds in that direction; it was amply ventilated, standing isolated in a large lot. She had been engaged sewing decorations at the theatre, distant about three-quarters of a mile, and had walked to and from it in the hot sun, during the whole season. Unfortunately there was no doubt about the case; she was moribund, with black vomit thrown up all about her.

On the afternoon of the 5th, I was called to see a patient in Congress street, about a hundred yards to the north-east of my first patient, but in a different street. His fever did not attract my attention particularly. He was of a lymphatic temperament, a northerner who had resided several years in the city, and whom I had attended some summers before in a very severe attack of bilious fever. His fever was not very high; he complained of pain and languor. I gave him a dose of blue pill, and directed oil the ensuing morning. On the 6th his medicine purged him and he was better. On the 7th, when I called to see him, he had left

the house and gone to his business. On the evening of the 8th I was called to him; I found him with a slow pulse, a cool skin, and a constant retching, ejecting glairy matter, and no bile.

For the first time, I suspected Yellow fever, and that the cessation of the fever had been the calm which follows the single paroxysm of that fever. I ordered a blister to epigastrium, ice to suck, and iced gum water for a drink, and my alterative powders, (two grains of calomel, and one sixth of a grain of opium,) every two hours. On the 9th, he was much the same, except that the prostration was greater, so as to seem to threaten death from sheer exhaustion. Towards night, I discovered flocculi of black vomit in his vomit. He continued to throw up the black vomit mixed with a good deal of mucus, all that night, and all the next day, and died on the night of the eleventh. The quantity ejected was not very great, and it was thrown up with a great deal of straining and mixed with mucus. He sank away gradually and gently, like one yielding to the effects of a depressing poison, without the power of reaction.

Let us contrast the first case and this. The first case occurred in an unacclimated subject—it was violent from beginning to end. The last occurred in an acclimated subject—it was slow in its progress, less marked in the first stage, but running its stage of calm and secondary fever as is most generally seen where death does not occur during or just after the paroxysm of the fever.

Now, no *fact* is more notorious than that acclimation to a warm latitude diminishes the susceptibility to yellow fever, and that it is far milder in those who have constantly resided south, summer and winter, than in those who have not; and who are consequently unacclimated. By this time, the eleventh of August, I had been called to many cases, all in the north-eastern part of the city, but in separate houses and different streets—not in any ways connected with each other, and I could not doubt that we had a different fever to contend with than a bilious remittent fever, and I will now proceed to state the symptoms which brought me to that conclusion. Of course I will state what was the general type.

The invasion of fever was more sudden than in ordinary Bilious fever, and although all fevers will be found to have a cold stage of some kind, it was not well marked in these. There was intense pain in the back, over the last lumbar vertebra and upper part of the sacrum and extending down the thighs along the sciatic nerve. The pain over the eyes, in the frontal region, was excruciating; the eyes were watery, shining, sometimes injected, sometimes not, with the upper lid partially drooping, like one whose eyes were watering from a quantity of smoke. The skin was intensely hot and very dry; the stomach was very irritable; the ejecta were either a serous fluid, bluish green, as if blue vitriol had been dissolved in water; or a glairy, viscid, tenacious mucus. But the pulse was not disturbed in accordance with the general perturbation, it seldom being over a hundred beats to the minute, and very often not more than eighty or ninety. This symptom I have been disposed to look upon as very characteristic. This febrile state lasted from twelve to seventy-two hours, on an average of about thirty-six hours, and was succeeded by a cessation of these symptoms, and an apyrexia, but without any critical evacuation whatsoever. After this, in fatal cases, black vomit came on immediately, or it was ushered in by increased irritability of the stomach, it becoming intolerant of the mildest ingesta, by a constant empty strain-

ing, and by the most acute sensibility of the epigastrium to any pressure. With this, in most cases, there was the most remarkable depression of strength; in some cases, several hours of a most perfect calm succeeded the paroxysm, and there was nothing to rouse suspicion of danger but a slow pulse, it generally sinking to forty or sixty beats in the minute. When black vomit supervened, a few hours terminated the case. With all this manifest affection of the stomach, the brain, as a general rule, did not sympathise. The intellect was not affected, until the last closing scenes of life, when the brain gave away in common with the rest of the organism.

This, considering the violence of the febrile paroxysm, must be considered one of the characteristics of Yellow fever. The thirst was great, but the tongue was not generally parched. At this period of the epidemic, the fatal cases terminated quickly; black vomit came on within three or four days, and the patient seldom survived beyond the fifth day. When he did so, the chances were greatly in his favor.

I have sketched only the prominent symptoms. Do they differ from those presented in a case of Bilious fever? Let us take a well developed, well marked case, with which to make our comparison.

A Bilious fever is almost always ushered in with a pretty distinctly marked chill. There are certain symptoms, as stated before, which are common to the various forms of fever, such as weariness, head ache, &c.; but the invasion of these pains is not so sudden in a bilious fever. After the cold stage, there is an evident reaction of the system, and a hot stage ensues. This, again, is followed by a third stage, viz: one of sweating; the fever then abates, with a distinct critical evacuation, either by urine or by perspiration; and in a few hours it again begins to increase, and having attained its height a sweating stage again follows; and so the fever goes on, the remissions becoming shorter, the stages less marked, until the system sinks under it; or the paroxysms become lighter, the remissions so marked and distinct that they slide into intermissions, and the patient recovers.

**MARKED PERIODICITY** is the distinctive characteristic of Bilious fever, as far as it has come under my observation.

But there are certain symptoms attending the paroxysms which are quite distinctive. The pulse becomes more accelerated in Bilious fever, ranging far above one hundred, increasing as the fever increases, becoming slower as it abates, presenting, as verified by me, in scores of cases, a variation of forty beats to the minute between my morning and evening visit.

There is the headache in Bilious fever, but is not of that intense supra-orbital character as in Yellow fever, and is more diffused over the anterior portions of the brain. There is very frequently great irritability of the stomach in Bilious fevers, and the stomach ejects great quantities of bile. Sometimes the bile may assume a greenish color. Very often, a severe attack of Bilious fever may present its paroxysms so marked, and the remissions so distinct, that you could with propriety class it in the intermittent variety; still the three stages, of cold, heat, and sweating, can be easily traced and marked in the form of Bilious fever. Now, if Yellow fever was but the highest grade of Bilious or Climate fever, we ought to find the worst cases of the latter closely approximating, if not running into the former. But what are the facts? The congestive type of Bilious fever (as witnessed by me in hundreds of cases) is unquestion-

ably the very worst type of that fever. Every year, however healthy, affords cases of it in those individuals who have been exposed to swamp miasma in their avocations. Watchmen are required at the wharves under the bluff of the city. Savannah lies on a high bluff, forty feet above the level of the tide, and fronts to the north. Northward is a low alluvium extending in a direct line due north, for fully four miles before the high ground of South Carolina is reached. Hutchinson's Island, immediately opposite to, and north of the city, is under the dry culture contract, which prohibits the planting of rice within a mile of the Exchange; but beyond the back river and on the Carolina side, are vast bodies of land, fully from two to four miles through in a northward direction, and extending east and west for about twelve miles, which are cultivated in rice with all its concomitant moisture. To the northeast of the city, these lands extend to the limit where the water becomes brackish and unfit for the culture of rice. To the direct east of the city, and beyond the limits of the dry culture contract, and on the Georgia mainland are many hundreds of acres of land cultivated in rice. To the north-west of the city, the alluvium takes a bend to the north, affording in that quarter some of the finest rice plantations in South Carolina. What constitutes the defence of Savannah against the malaria of these low grounds? I answer; that, fortunately, almost the whole northern front of the city is defended by a high row of brick storehouses rising some twenty or thirty feet above the level of the plain on which Savannah stands; which storehouses are not inhabited, and thus afford a *material* bulwark against the introduction of malaria into the city. To the north-east of the city, this protection is not afforded, because the storehouses have not been built up in compact mass *above* the level of the plain of the city, as they have been at the portion of the front more westwardly. In this portion of the city there are many dwelling houses on Bay-street which are not protected; whenever the winds prevail from the north or north-east, those houses have invariably, and I speak advisedly from many years' experience, afforded the first cases of Bilious fever, and the most malignant types of it every year. I have a patient who lives in this locality. About six years since he moved into his house, and he and his whole family (a wife and three children,) were desperately ill of Bilious fever. I advised him, nay, insisted upon it, giving my reasons, that in the sickly season, when malaria was generated, (say from the first of June until a frost in the fall,) he should keep all the windows on the north side of his house closely shut by the sashes, from early in the evening until the sun was high up in the morning. He has *done* so, to the exemption of his family from fever, and the great curtailment of my professional fees. Such has been my advice to all persons inhabiting houses exposed in a similar manner, and I distinctly aver, that where the advice has been followed, the same result has obtained.

Those individuals whose *liberty* is the practical one so much sighed after by the pseudo-philanthropists of the North, of working or starving, are the ones who take the perilous occupation of watching at night under the bluff, and who are thus exposed to the malaria which may be blown from the north-east, the north, or the north-west, just as the wind may set.

The summer of 1855, was the healthiest I have ever known in the city. Fevers did not rise above the grade of intermittent, as a general rule,

yet I met with two cases of congestive fever, both of which were fatal within four days from my first visit, and each individual had contracted his fever, from exposure at night and early in the morning, in the very locality I have pointed out. They were the fac simile of cases occurring more or less frequently every year; they were malignant, and they were fatal; but they offered not the slightest resemblance to Yellow fever. The fever was high, the pulse was accelerated up to 120 to 140 in the minute; while the skin was hot to the touch, it was covered at times with moisture, standing out in great beads of sweat. The brain was affected with stupor from the very commencement. When the fever remitted, which it did in the morning, and notably on the morning of the alternate day, the brain would become relieved in a measure, but as the fever exacerbated it would again become oppressed. These cases terminated in a stupor many hours before death. Perspiration in the very height of the fever, I consider as a very common symptom of the congestive form of Bilious fever, and I always consider those cases most dangerous which show this symptom, while there are stupor, an accelerated pulse, and an intensely hot skin. Whilst the cases which terminated favorably have the paroxysm of fever resolved by a critical sweat, with an abatement or cessation of the other febrile symptoms; I have time and again seen a man *in articulo mortis*, with a pulse so accelerated that it could not well be timed; in a profound stupor, and with the sweat standing out on his skin in great drops; and this condition of affairs had not supervened just before the patient became in *extremis*, but had gradually come on in the last exacerbation of fever. There are other cases which come under the category of pernicious or malignant intermittents, or congestive chills. I have known a patient in a state of perfect apyrexia in the morning, to die in the afternoon. These are the most malignant forms of climate fever met with in this city. I may fail to convey an idea of their real character, but it is from want of power in my pen, not from want of their total dissimilarity to Yellow fever.

Late last fall, but before a frost, a watchman on the Charleston wharf, at the northwestern portion of the city, was found early in the morning lying in a state of complete insensibility. The night had been a stormy one; he had had intermittent fever, but had persisted in going to his work in spite of the remonstrances of his wife. He was carried to his house on the brow of the bluff, and I was sent for. I found him in a complete stupor, with his pulse nearly gone, his extremities icy cold, his whole periphery cool, skin mottled, purplish, or rather in some parts bluish, with a clammy sweat, hurried respiration, and in short, in what I considered a dying condition. I had him stripped and rubbed dry, had dry heat applied to the surface, sinapisms to every available point, and a large blister to the epigastrium and one to each leg. Friction was applied continuously for some hours; after awhile he was enabled to swallow: I gave him hot brandy toddy every half hour, and calomel two grains, and opium one-sixth every two hours. Reaction gradually took place, and the next day, about twenty-four hours after he had been brought home, he spoke. From that time he began to mend, and is now at this present writing, "earning his bread by the sweat of his brow."

The rationale of this case is simple. The exposure to cold and moisture in undue degree, converted what would have been, without such exposure, a mild paroxysm of simple intermittent into a malignant conges-

tive chill, oppressing and depressing all the vital powers so as to prevent proper reaction, thus giving a fair representation of the congestive form of Bilious fever. If it were not so, I am at a loss to comprehend what that type of fever is, and must come down from the witness' stand as never having seen a genuine case of it. One more prominent symptom remains to be noticed. While a jaundiced hue often follows an attack of bilious fever, another colour is its most frequent concomitant. There is in the worst types of it, a peculiar pallid anemic hue. This hue can be seen in those cases which have not fully recovered from attacks of intermittent fever, or where, as is often the case, a severe attack of bilious remittent fever has been succeeded by attacks of irregular intermittent fever prolonged late in the fall or even after a frost.

In my clinical lectures at the Savannah Hospital, I have frequently diagnosed malarial fever subjects from merely seeing them, before, I had asked a single question of the patient. In enumerating the peculiar signs of Yellow fever, I did not speak of the yellow color of the skin because I wished to reserve that point up to this period. Now, as a *general rule*, fatal cases of that disease presented that discoloration; and an unfavorable prognosis was almost always to be formed when the skin, began to assume that color; yet in the commencement of the epidemic during our intensely hot and dry weather, when the cases were more acute and terminated more rapidly, I saw many dead bodies whose skin could not have afforded any index to the disease of which they had died, although black vomit had been freely thrown up before death. Of the cases which did recover, although many had been very severe, very few presented any morbid discoloration of the skin, and it was a subject of frequent remark by those who returned to us after the pestilence had left us, that they were astonished to see the survivors looking so well and free from any marks of previous diseases. A gentleman, his wife and child, had all had very severe attacks of the fever in September 1854. He visited the North late in October for a change. He has often told me that persons there would hardly believe that they had just come from what was then an infected city, and that they had been sufferers from the scourge, so little did they bear any traces of it with them. Let me then sum up what are the prominent symptoms during life of each disease, before I go into the signs presented after death. I speak of the average of symptoms without noticing the varieties which occur in this, as in every other disease. In Yellow fever, the access of the disease is generally sudden; a person may be about in the morning and quite ill in the evening, or may be well in the evening and attending to business and be prostrated in the morning following. The sympathetic pains are much greater; the pain is over frontal region, over sacrum and down the thighs; the skin is hot and dry, and does not pour out perspiration as in Bilious fever; the pulse, never mind how high the febrile symptoms, seldom ranges over a hundred; the tongue is not coated, on the contrary offers no index of the state of the stomach. The paroxysm of fever subsides without any critical evacuation and a state of calm succeeds which lasts from a few hours to forty-eight hours. The pulse at this stage generally falls as low as fifty or sixty. In bad cases, the stomach invariably shows great tenderness upon pressure, or there is an uneasy sensation in the epigastrium, and an intolerance of food. With this, there is also a remarkable prostration of strength. Many cases seem to be threatened with death from

sheer exhaustion ; nor is this at all dependent on any previous evacuations from the system, nor is it always in a direct ratio to the severity of the febrile paroxysm, for it would occur where there had been no evacuation, and would follow a very slight paroxysm. If the case continued to grow worse, the retching is followed by the vomiting of the black vomit, the occurrence of which at the season of the year when alone Yellow fever prevails in this climate, leaves no doubt as to the nature of the disease or the fate of the case ; or hemorrhage would occur from the mouth, the lips, the tongue, the gums, a scorbutic oozing. In an epidemic of Bilious fever, many of the cases have their periodicity so well marked that no one could doubt as to their true nature. Other cases have their remissions more obscurely marked, and without close watching, would seem to be continued fever, but a close observation will generally detect marked remissions, and decided exacerbations. The remissions almost always occur in the forenoon, the exacerbation in the latter part of the day and at night. Bilious fever seldom attains its height at one bound as does Yellow fever. Questioning will frequently reveal the fact that there has been a distinct intermission between the first and second paroxysm. The pulse is most certainly more accelerated in Bilious fever, reaching often into a paroxysm up to 120 to 140. It will also vary many beats in the course of the day. A paroxysm seldom lasts longer than twenty-four hours when it either terminates, or there is a marked remission accompanied by sweats more or less profuse, and a sensible abatement of all the febrile symptoms. After this fever again rises, again runs the same round. If the case is to terminate favorably, the paroxysms become lighter and lighter, the remissions more marked ; very frequently they may be considered perfect intermissions, and you will see that the great peculiarity of Bilious fever is its *periodicity*. In the paroxysms there are headache, and backache, and pain the sciatic nerve, but they are not so marked, as a general rule ; not of such a neuralgic character as is often seen in Yellow fever. There are nausea and vomiting, but bile continues to be thrown up to the last stage of Bilious fever, should it be a case marked by great irritability of the stomach. Now when a person is attacked by Yellow fever, of course there is some bile in the system, and it may sometimes be thrown up at the very commencement of the attack, but certainly it is never seen in the advanced stages of the disease.

In October 1842, I published the article on Black Vomit in the American Journal of the Medical Sciences alluded to before. My experience was then limited, but I adhere without qualification to the opinion then announced by me, viz : "Perhaps there may be bile in the incipency of the attack, before a physician is called, but in every case that has ever come under my notice, that has terminated in black vomit, *the absence of bile in the excretions has been the distinctive characteristic of the disease.*" The head is decidedly more affected in Bilious fever, than in Yellow fever. It is a common thing for patients to remain in their senses long after they have reached the stage of black vomit. Just before death, the brain gives way as the other organs do. But in a bad case of Bilious fever there is almost always oppression of the brain, and cases lie in a stupor for two or three days before death. I think the anatomical lesions discovered in Bilious fever after death, which, I will detail further on, sufficiently account for this.



I think I have furnished sufficient points of contrast for the symptoms during life. Let us follow out the diseases, and see what anatomical lesions are left on the dead body by them.

In Bilious fever we find marks of disease on the mucous coat of the stomach, the upper part of the duodenum and the liver. These I may state as invariable. In a large number of cases, and particularly in the worst types of Bilious fever, there are traces of the disease on and under the meninges of the brain.

In Yellow fever we find the same organs affected, except that, as the brain is involved during life in but comparatively few cases, it does not exhibit the same uniform alteration as do the stomach and liver. Now here is a point of relation, and to what does it amount?—to no more than does the relation of scarlet fever to measles, in each of which the skin and air passages are affected. In Bilious fever we find what I consider undoubted marks of an inflamed stomach.

The mucous membrane is often red and injected, either punctated or arborescent, it is often softened, so as it can be easily scraped off with the handle of the scalpel; it is very often of a slate color in protracted cases, but *invariably* traces of bile can be detected in the stomach or in the intestines. In Yellow fever, we also find the mucous membrane injected, but certainly much more generally and much more intensely than in Bilious fever. You do not always find black vomit in the stomach, because it may have been ejected just before death, but most generally you will. I have opened, in my day, several subjects dead from Yellow fever, in whose stomach black vomit was found, although not a particle had been thrown up. The patient, from Augusta, who entered the hospital in 1839, alluded to before, was one of these cases. Without a post-mortem examination, it might have remained in doubt as to what his fever was. Another case, amongst the very last of 1856, was examined after death by Dr. J. B. Read and myself, and black vomit was found in the stomach, although none had been ejected during life.

Black vomit is however generally found in the stomach; but it is found free in almost all instances, lying on the surface of the mucous membrane; but there are cases in which the peculiar flocculi of black vomit can be detected in the very mouths of the patulous vessels of the mucous membrane; and in some cases, I have seen a dark black arborescent injection running under or in the mucous membrane, exactly like the red arborescent injection so frequently met with. Now black vomit is a hemorrhage. I expressed in 1842, (*loc. cit.*) my belief, that it was blood altered; in 1852, I detected blood corpuscles existing in it; I exhibited them under the microscope to Dr. Wragg, Dr. West, Dr. Read, Dr. Bulloch, and the late Dr. Ladd. Here is proof positive that the mucous membrane is the seat of a peculiar hemorrhage. Dr. Copland has some grounds in wishing to designate Yellow fever as the hæmagastric pestilence. Whatever may be the real poison, it undoubtedly has a peculiar tendency to produce hemorrhage from the stomach; but there is a great deal of acid in the stomach, and it produces a peculiar effect on the blood, coagulating it into the flocculi of black vomit. The ejecta in Yellow fever, tested by litmus paper, always show strong acidity; it is the acid which turns the blood, and prevents the hemorrhage from being a mere hæmatemesis. Occasionally the hemorrhagic tendency of the disease is shown by its action on the bowels, and blood is passed downwards. Such cases, as far as my

experience goes, are always fatal, are genuine Yellow fever; but must be distinguished from those in which the black vomit is passed per anum; in the latter case, recovery is more apt to follow than when the unaltered blood is passed.

Now, if Yellow fever were but the highest grade of Bilious fever, we ought every season to meet with occasional cases in which black vomit would be found in the stomach after death, even if it were not ejected during life. Such cases have never occurred in experience. But it is when we examine the liver that we find unmistakable evidences of the peculiar nature of Yellow fever. In Bilious fever we find the liver of various shades, dark brown, umber, bronze, but always gorged with blood. In Yellow fever it is always altered in color, being pale and destitute of blood. The best color to which I can compare it is boxwood. Some boxwood is of a dirty yellow, some of a brighter yellow; so of the liver, some are of a light pale boxwood, almost a dirty ash white, some of a more pronounced yellow color. In a Bilious fever liver, by pressing a piece of white paper on the cut acini, you will stain it yellow, showing the secretion of bile still having existed up to the time of death; but this cannot be done with a Yellow fever liver. It sometimes contains a thin bloody serum, most generally it is almost dry. In 1827, Dr. Warning pointed out to me this state of the liver as the exact state presented in our fatal epidemic of 1820. In every case that I have had the opportunity of examining from that time to the present, I have found the identical appearances. I examined cases at all times of our epidemic of 1854, and I found no variation of any account. I consider this conclusive proof of the identity of the disease, from 1820 to 1854.

One case early in the season, presented a mottled liver, that is, there were spots in it which had undergone the peculiar change incident to Yellow fever, and there were other spots in which the liver presented the natural Spanish brown color. I attribute this to the patient having died before the change in the circulating fluids had been sufficiently great to effect the alteration of the entire parenchyma. In some cases of Yellow fever, I have seen the gall bladder contain only a dirty, thick, viscid bile. In Bilious fever, it is always filled with bile.

In Yellow fever, the absence of bile is not confined to the stomach: you may search from the cardiac orifice to the anus without finding a trace of it; often have I done so, and never have I succeeded. I do not say, that a person who has the opportunity of examining every fatal case which may occur in a large hospital may not succeed better, but when a man is harrassed with constant demands on his time, as a physician in full private practice will be in great epidemics, he cannot examine every case. It was my object in 1854, to procure a record of the post-mortem appearances during the various periods of the epidemic, and I examined cases which died in August, September, October, and November, and I found a great uniformity in all of them—the discolored liver and the total absence of biliary secretion in the primæ viæ.

I was the attending physician of the Savannah Hospital for every summer, from that of 1835 to that of 1849, inclusive. I rarely allowed a fatal case of Bilious fever to escape without an autopsy. I state most distinctly, that in every case I found an abundance of bile in the intestines, if I did not find it in the stomach.

My examinations of the head in Yellow fever have been very few. In

the great majority of cases, the cerebral symptoms did not induce me to do so. I have seen cases in which the head was involved from the commencement, and, doubtless, those cases would have furnished evidences of cerebral engorgement; but, as a general rule, the local manifestations of Yellow fever are in the stomach and liver. The existence of long continued stupor in Bilious fever made me examine the brain very frequently; indeed, in the great majority of cases, and as I stated before, enough was found to account satisfactorily for the stupor;—serum was generally effused under the coverings of the brain, in the ventricles, and under the arachnoid, and the latter membrane was frequently opalescent. I have always considered the brain as a special organ for the local manifestation of Bilious fever, both from the decided symptoms presented during life, and from the post-mortem appearances.

I present for the inspection of the Society, drawings in oil colors taken from nature, of the appearances of the liver in the two diseases. An inspection will be better than any description. The Society cannot fail to see, at a glance, the vast difference from the brown and bronze of the four copies of the Bilious fever livers, and the light yellow boxwood-color of the Yellow fever liver. It has been my object to sketch the prominent characteristics of the two diseases, presented during life and after death. If they be so widely and so uniformly different, how can we class them as the same disease, modified only by intensity?

The second opinion entertained, that Yellow fever is a disease, *sui generis*, special, distinct, has been sufficiently discussed in the consideration devoted to the opinion, whether it is only a higher grade of Bilious fever. It will be seen that I entertain this belief.

The question of its origin and propagation would, itself, afford scope for an essay; and mine has already occupied so much time, that I could not go into it now. I can bear my decided testimony that in no instance has there ever been the shadow of the shade of proof, that it ever was imported into Savannah from abroad. On the contrary, the proof is positive that its first victims had had no communication, direct or indirect, with any source of infection. Moreover, when the British steamer Conway, which ran to the West Indies, touched at this port, I attended two cases of Yellow fever from her, both of which died in the city, and yet no disease was propagated from them. In March, 1841, (as will be seen by my article quoted before,) I brought a case from a ship from Demerara, and placed it in the hospital where the patient died. It is said that it can be propagated from abroad in a city, although most give up the point as to its contagion in the country. The whole experience of 1820 and 1854, when our citizens fled by hundreds into the country, and into neighboring villages, towns, and cities, does not afford a single instance where the disease was spread by the fugitives. If then, it is not propagated into the country, and into other cities by land routes, why is it supposed to be so fatal when it comes by sea? If one case can originate in a place, why not ten or twenty? Case upon case occurred in 1854, in which the patients had not been near a deceased subject. Isolation was no protection. The poison, whatever it may be, spread like a pall over the whole city, and covered in its embrace all who staid, or entered its precincts; but a quarter of a mile beyond its limits the poison became innocuous. Such is fact. Let those who appeal to fancy, disprove it, or theorise upon it.

Again : facts prove that Yellow fever is a city disease. Exposure to swamp malaria, staying on a rice plantation in the summer, and in the fall before a frost, will produce a malignant and most fatal Congestive-bilious fever; but *never*, no *never* Yellow fever. Such cases of Bilious fever, as I stated before, I meet with every year; but, thank God, very seldom have I encountered cases of Yellow fever.

Yellow fever, in this locality, has this in common with Bilious fever, it never prevails except in the summer and fall months, and is most effectually cut short by a frost. As a general epidemic, it ceased to prevail in Savannah about the second week in October in 1854; yet the poison continued in the atmosphere until a frost, and attacked those strangers who imprudently returned into the city. The last resident whom I attended was attacked on the 25th of October. The cases which occurred afterwards were, without exception, strangers and unacclimated.

Since my connexion with the Savannah Medical College, I again attend the hospital, and it was there, and amongst seamen that I met with my last cases. They lay promiscuously amongst patients with other diseases, but in no single instance did any body catch the disease. I stated towards the close of that ever memorable season, that I would expect to meet with Yellow fever for a fortnight after a frost. I had taken up the belief that ten days, or a fortnight, was the period of incubation of the poison. My last case died at the hospital on the 27th of November; frost had occurred on the 13th of that month. The unfortunate subject had reached our city before the mighty destroyer of the poison had withered and destroyed its noxious powers.

Such, gentlemen, is my *experience* of the relation of Yellow and Bilious fever.—*Southern Medical & Surgical Journal*.

SAVANNAH, April, 1856.

### *Hints to Diagnosis. A Clinical Lecture Delivered at the Charing Cross Hospital.*

BY HYDE SALTER, M. D.

GENTLEMEN: In casting about for a suitable subject for this my first clinical lecture to you—something that should be at once general and practical—it has occurred to my mind that I could not choose any thing that would better fulfil these conditions, or be likely to be more useful to you, or be capable of more frequent application and illustration in my after instructions, than laying down for you some simple rules for your guidance in the formation of diagnosis. Such rules, if worth any thing, must be valuable to all, but especially to those whose practical investigation of disease is all before them.

Correctness of diagnosis is an all-important thing: of your practical duties in after life it will constitute a fair half, for the recognition and comprehension of their nature will be a necessary condition of the correct treatment of the cases that will come under your care. I think myself that diagnosing disease is a mental process of no mean order, that it

calls into exercise some of the highest faculties of the mind, and that to do it well, requires a mind minute and exact, scrutinizing and inquisitive, retentive, and analytical, capable of generalizing, and close in its reasoning. There is nothing in which the members of our profession differ more from one another than in their way of making a diagnosis. Given, two men, equally well informed in their profession, with an equal substratum of knowledge to start from, the one's diagnosis will be made with twice the ease and certainty, and in half the time of the other's. Some blunder and bungle in a blind sort of way; they strike out here and there like a man fighting in the dark, without any aim or method, and their hitting the right thing is little better than a matter of chance; some on the other hand, address themselves to their work in a way entirely systematic, they do not throw away a single question, or put a purposeless one; there is not one too much, or one too few; they drive each well home; they keep their aim in view with an undeviating steadiness, and follow it up with a pertinacity that nothing can divert or abate: to watch a diagnosis made in this way is one of the greatest treats—I know of few greater; but to listen to one clumsily made is an intolerable infiction; but, worse than this, it is probably erroneous, and, therefore, perilous to your patient; for on a false diagnosis you will hardly raise a correct therapeutics.

Let me, therefore, beg your attention to the following short and simple rules, which I am sure you will find of great assistance to you.

Rule I.—Gain information in all possible ways without, and additional to, asking questions; that is, take the testimony of your senses—of sight hearing, touch, taste, smell; examine well your patient's physiognomy, his expression, his complexion, his general aspect, his manner; observe his physical condition, if there are in it any of those pathognomonic signs that certain diseases hold out; mark the tone of his voice, its strength and weakness, whether there is in it any thing emotional, whether it is hurried or deliberate. You will find the habitual practice of this great advantage to you and the evidence thus acquired of great value, for,

1st. It is a kind of evidence that cannot be sophisticated. Your senses cannot deceive you, your patient may, at least, attempt it, and this evidence may either corroborate his oral testimony or refute it. For example, suppose a man, on a club, professes the sight of one of his eyes to have failed, and so to be unable to follow his employment, and to be suspected of *malingering*, and on seeing him you detect an inequality of his pupils, and a slight ptosis of one of his eyelids, which had escaped the uninitiated; you feel at once that the man is probably speaking the truth. Suppose, on the other hand, that a man, whose symptoms make you suspect threatening delirium tremens, denies having taken any spirits for a week, and you smell his breath strongly of gin, you have not only strong presumptive evidence that your opinion is correct, but that the man's statements must be disregarded. This kind of evidence is, therefore, not only the most unimpeachable in itself, but a valuable check on other testimony.

2d. It gives you a kind of evidence that nothing else will. Some things, definite in themselves, and that the senses can recognize, can yet not be described. Those who have once seen them know what they are, but no others. Such things are sometimes very subtle and delicate, but they are often very important and distinctive, even pathognomonic. Take,

for instance, certain physiognomies; take the *facies hysterica*: I never saw a good description of this, I could not give one myself, but when once recognized, it is very unmistakable, and very characteristic, and might make all the difference in your opinion of any given case. In some instances, as in skin disease, this sense-testimony is the only evidence you require.

3d. It is evidence you can obtain without your patient's consciousness; and this under some circumstances is most important, because in some things the consciousness of the patient introduces a disturbing element, and invalidates the conclusions you would draw. For example, in counting the respiration, if your patient knows what you are about he immediately directs his attention to his breathing, he breathes voluntarily, and, inevitably, unnaturally; the moment the will is introduced into the respiratory act, which ought to be unconscious and involuntary, it becomes unnatural. When, therefore, I count the respiration, in order to divert the patient's attention from what I am doing, I feel the pulse, which he imagines I am counting, and so breathes naturally. So, again, with regard to the pulse, in some cases, especially where there is much emotional disturbance, it is very desirable to ascertain its condition without the patient's consciousness, which would at once derange it. Now, taking the wrist would directly inform him of what is going on; I therefore pass my hand over the forehead, and keep it for a few seconds applied to the temples, as if I were feeling the temperature of the head, while in reality I am ascertaining the state of the pulse from the temporal artery.

4th. In some cases it is the only evidence you can get, as in the case of young children, or those who are reduced by their state of disease for the time to the condition of infants, in the etymological sense of the word, that is, cannot express themselves, as, for instance, from mania, coma, or any other condition interfering with intelligent speech.

5th. It will save you an immense deal of time; you may often by a glance obtain an amount of information that it would take a long time to acquire by question and answer. Practice will render this survey of your patient, and your conclusions from it, wonderfully rapid, and moreover, render them more comprehensive and more infallibly correct; you will be astonished by and by at the almost instinctive correctness of the impressions you will thus acquire; from the slenderness of the data, the unconsciousness of mental process, and the rapidity at which the conclusions are arrived at, they will seem to you like inspirations. As an instance of the saving of time, see how one's work is shortened by chlorotic lips or a yellow conjunctiva.

Now, there are two kinds of such evidence as this—sense-evidence: one is that which is gained without any special process, without the use of any instrument or artificial means, which is immediate, impromptu, and of which the patient is unconscious; the other is that acquired by some instrumental means or special process, as by the stethoscope, by physical examination, the microscope, chemical reagents, etc. It is the former to which I particularly refer.

Rule II.—Lay greater stress on some signs than on others; as, for example,

a. On anatomical than on functional disturbances. Sometimes symptoms are discrepant—the tide of anatomical evidence will set in one direction and functional in another; in this case, always give the prefer-



ence to evidence of an anatomical nature, for anatomical signs are always of more certain import. Functional symptoms have often the value of probability only—they imply; anatomical symptoms have generally the value of certainty—they assert. For example: suppose a patient to have been suffering for a week from all the symptoms of acute pleurisy—intense pain an inch or two below the nipple, inability to take a deep breath, or to lie on that side, intolerance of pressure in the corresponding intercostal space or spaces—but, suppose that, on listening, you hear pure and natural respiratory murmur, and a clear absence of all friction-sounds, and that percussion and auscultation give you evidence of the thoracic viscera being in every respect anatomically healthy. Here you have a dilemma; anatomy says one thing, function another—which are you to believe? Anatomy, certainly. Why? Because you know that if the cause of pain had been pleuritis, you must by that time have had some anatomical result of it; its absence, therefore, negatives the supposition: and so you infer that it is rheumatism of the intercostals, or other muscles of that part of the parietes; or neuralgic; or, if in the case of a young woman, possibly hysterical.

b. Lay greater stress on some functional symptoms than on others; for example, on tenderness than pain. Suppose a patient were to come to you one day, complaining of colicky pain in the epigastrium and about the umbilicus, passing through to the back, and the next day you find he has tenderness in the right iliac fossa, you know that this last is the real seat of the mischief, and the other merely the situation to which the pain was referred; this is a phenomenon of frequent occurrence in abdominal affections. Again, vomiting has a certain indicativeness, but blood-vomiting a much higher and more distinctive one.

c. Distinguish between pathognomonic and indifferent symptoms. The value of indifferent symptoms—i. e. those common to many diseases—is general, that of pathognomonic, special; indifferent symptoms may leave you many alternatives, pathognomonic, none. Fever, for example, is an indifferent symptom, but the several stages of the fever-paroxysm occurring at the same time every other day is pathognomonic; it leaves you no alternative; you know at once what you have to deal with.

Rule III.—Pursue a definite order in your catechisings. The principle on which a diagnosis is made is that of elimination, of exclusion, or, as logicians say, of exhaustion, showing what disease is by showing what it is not. Every answer that is elicited strikes out a certain number of contingencies, and so circumscribes the area of what is still uncertain. Indeed, the making a diagnosis is very much like the game of "Twenty Questions," in which several people fix upon one word or thing, while another is to ascertain what that word or thing is by the answer he gets to twenty questions put to them in order. If the questions are well and methodically put, the discovery of the subject thought of is almost inevitable, however eccentric or bizarre it may be, and often a good deal within the prescribed number of questions. To take for the sake of illustration, an example from this game which I remember to have occurred. Q. Is it animal, vegetable or mineral? A. Animal. Q. Is it marine or terrestrial? A. Marine. Q. Is it natural or artificial? A. Natural. Q. Is it useful or ornamental? A. Ornamental. Here was an animal marine production, used as an ornament in its natural state. At this stage the questioner guessed a pearl, and his guess was right; indeed, the an-

swers to these four questions seemed to leave no alternative. See now how much each of these questions excluded, how much the first—two-thirds, we may say, of created things; how much the second—more than a half of this remaining third; then, how much the third; while the exclusion implied by the answer to the fourth was almost complete. Just such, and with such an object, should be the interrogations put in the diagnosis of disease.

Now, this principle of elimination or exhaustion gives rise to two rules with regard to the order and kind of questions put to your patients.

a. Put first those questions which exclude the greatest number of alternatives, that is, what is called "leading questions."

b. Let each of the questions be devoted exclusively to the elimination of a certain amount of those alternatives, which the previous answers have left undecided; let them apply strictly and solely to what is left unsettled, that is, do not throw away any questions on points that previous questions have set at rest.

The order and kind of questions, based on these rules, that seem to me the best, and which I commonly observe, is something as follows:

1. Where is the pain (or symptom, whatever it may be)?
2. How long has it existed?
3. Has it ever occurred before?
4. The apparent cause?
5. In what way the functions of the organ are disturbed?
6. The *lædientia* and *juvantia*?
7. Anatomical evidence?
8. Physical examination?
9. History, especially with regard to

a. Inherited diathetic peculiarity, such as struma, gout, rheumatism, etc.?

b. Alcoholic, or other intemperance?

c. Syphilis?

d. Occupation?

It would not be necessary to put all these questions in all cases, some would be settled by few of them; for example, most stomach affections would be settled by the fifth or sixth, most chest affections by the eighth; many affections would carry you on to question 9, clause a; delirium tremens to clause d; clause c will often be the turning point of your diagnosis; while lead palsy would carry you on to clause d. Often, however, you will not have to put all the questions; the answers that you will receive from some will involve an inversion of the order of the rest, and you will make a short cut to a determining point.

Rule IV.—Other points must be observed in examining your patient, besides method.

First. Be slow and deliberate; give yourselves all the advantage over, and hold on, your patient, that you will gain by deliberation, self-possession, and presence of mind. Besides, you will, by a sort of infection, induce a similar character in your patient's answers, and you will have time to deliberate on the answer you get.

Secondly. Ask one thing at a time, and let the single object of that question be as definite as possible.

Thirdly. Pin your patient to your question; do not let him wander and be irrelevant, do not let him be indefinite, do not let him be evasive. You



will often be troubled with answers of all three kinds, especially from some classer of patients; the first kind you will get from old women and the garrulous, the second from the Irish, and the third from malingerers; indeed, you might name them the *responsio garrula*, the *responsio Hibernica*, and the *responsio mimotica*, respectively. I know of few things more difficult than making a prompt diagnosis out of an Irish patient; he calls his chest his stomach, and his stomach his chest; his heart is ubiquitous; if you ask him how long he has been ill, he tells you "a good bit;" and if he is better, he says he is "no worse." I speak of the lower orders of Irish only, and I mention it as a warning, that you may know what to expect, and prepare yourselves accordingly, when you hear the Irish accent.

Fourthly. Be considerate and patient, and kind in your manner. This you will find of immense advantage, not only to your patient but to yourself. You will get both kinds of evidence much better, more truthful, and more natural—both that which you will receive in answer to questions, and that which your patient will furnish you with unconsciously to himself. In timid persons, and those whose affections are of an emotional character, this point is of especial importance, and most of all in children; if you once set a child crying, your further investigation of its case is greatly embarrassed. Dr. West, in his work on diseases of children, has made some admirable observations on this point, that ought to be engraved on the memory of every one having any thing to do with the treatment of children: I will rather refer you to them than mutilate them by abbreviation.

Rule V.—In difficult cases, where you are at a loss, it is often a good plan to forego the ordinary method of interrogating, and adopt some other. One of these is to

Let the patient tell his own story in his own way. In this way sometimes things will creep out that set-questions had not elicited, or questions may be suggested which before had not been thought of, but which may reach exactly the point which was required to clear up the doubt. Another is,

Begin at the head and go downwards, as hunters "draw" a forest; pass through all the organs in a regular anatomical order, so that the state of none may elude you. In this way sometimes you may stumble upon some mischief in a part where you had little suspected it: at any rate you will be sure of meeting it where it exists, and will feel that all the organs which in your progress you leave, as it were, in your rear, may be disregarded.

Rule VI.—Do not be content till you have elicited a natural group of symptoms, but when you have once done this, assure yourself that you have attained your object. Do not let any amount of evidence in the opposite scale countervail it—the conclusiveness of such evidence is absolute, not relative; do not let any improbabilities, and deficiency of cause, any suspicion of collusion, shake your faith in the infallibility of this internal, this intrinsic evidence. No amount of sophistication can enable the uninitiated to simulate the natural and self-consistent features of disease.

Rule VII.—Make yourselves what jurists call "skilled witnesses;" familiarize yourselves with all those means of diagnosis, and of enlarging and rendering more precise your knowledge of disease, which the phy-

sician of the present day finds at his command, or you may renounce all hope, either of doing justice to yourselves or your patients, or of competing with your brothers in the profession, who are familiar with the use of these invaluable instruments—instruments, the revelations of which have almost transformed the face of modern medicine. There was a time when people used to die of dropsy; nobody dies of dropsy now. Those who used to die of dropsy now die of lung, or heart, or liver, or ovarian, or kidney disease. And what has shown us this? Mainly, the stethoscope, the microscope, and the test-tube. We cannot afford to depreciate or dispise these aids, we shall be but blind guides without them; and besides, human life is too precious a thing, and our tutelage of it too solemn, to permit us, in any thing that appertains to it, to give way to prejudice, or a miserable conservative obstructiveness.

The stethoscope was despised once, and there are many now of the same class of mind who attempt to depreciate the microscope, the chemical reagent, the stethometer, the weighing machine, the ophthalmoscope, the test-paper, and the spirometer. We may safely leave them to fight their own battle. In the meantime, instead of abusing them let us use them, let us make ourselves masters of them, let us add them to our resources.

Rule VIII.—Lastly, observe for yourselves, think for yourselves, judge for yourselves. Do not constantly carry about with you, opinions that you have read as the interpreters of what you see; if you do, it will constantly hamper and shackle your minds, you will get yourselves into a habit of seeing only what others have seen, and be blind to a great deal of instruction that disease will offer you. The present generation of medical men read too much and think too little; the chronic and almost endemic malady from which we suffer is a plethora of books. There are some who can never see or discuss a case without quoting some authority; instead of seeing with their own eyes they are always seeing with the eyes of Graves, or Allison, or Andral.

Now, in literature, "authority" may be final, and the author of the *Illiad* and the *Æneid* may determine the force of a particle or the length of a syllable; but in science this is not so, and the testimony of nature must always overrule that of her interpreters. If you want to make any advance in medicine; if you would add any thing to the present stock of our knowledge; if you would receive into your minds the teachings of disease in all their simplicity and freshness, you must see and hear with your own eyes and ears, and interpret for yourselves. Vindicate to yourselves, and constantly exercise, that attribute of the best class of minds— independent and self-reliant thought; take as your own the motto of our highest scientific society, and early learn *nullius in verba magistri jure*.—*Nashville Journal*.

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### *Politics and Medicine.*

"*Eloquence and Poetry—Dr. Holmes on Surgery and Sumner.*—At the late Annual Festival of the Massachusetts Doctors, Dr. Holmes, in speaking of the dignity and usefulness of the healing art, thus very happily alludes to Mr. Sumner:

"Nay, come down to nearer times and places, and look into the chamber where our own fellow citizen, struck down without warning by the hand of brutal violence, lies prostrate, and think what fearful issues hang on the skill or incompetence of those who have his precious life in charge. One little error, and the *ignis sacar*, the fiery plague of the wounded, spreads its angry blush over the surface, and fever and delirium are but the preludes of deadlier symptoms. One slight neglect, and the brain, oppressed with the products of disease, grows dreamy, and then drowsy; its fine energies are palsied, and too soon the heart that filled it with generous blood is stilled forever. It took but a little scratch from a glass broken at his daughter's wedding, to snatch from life the great anatomist and surgeon, Spigelius, almost at the very age of him whose recovery we look to not without anxious solicitude.

"At such an hour as this, more than at any other, we feel the dignity, the awful responsibility of the healing art. Let but that life be sacrificed and left unavenged, and the wounds of that defenceless head, like the foul witch's blow on her enchanted image, are repeated on the radiant forehead of Liberty herself, and flaw the golden circlet we had vainly written with the sacred name of Union!

"Dii, prohibete minas! Dii talem avertite casum!

"I give you, Mr. President,

"The Surgeons of the City of Washington—God grant them wisdom, for they are dressing the wounds of a mighty empire and of uncounted generations."

Dr. Holmes's sentiment was received by the rising of the whole Society, who responded with three hearty and enthusiastic cheers."—*American Medical Gazett.*

"*Senator Sumner and the Doctors.*—The newspaper accounts of the wounds of the Senator of Massachusetts, and the professional treatment to which he has been subjected, have so mystified his case as to render it ludicrous if it were not obvious that they are furnished by reporters for partizan presses, whose ignorance and prejudices conceal the truth.

Dr. Bunting, of Montreal, who is itinerating through the country, with the celebrated curiosity of the man with an open wound in his stomach, on exhibition to the Faculty, seems to have been the first surgeon who saw the wound, and he swears that it was upon his head, and that it was some six inches *deep*! which, if true, would have brained the Senator, and been "past all surgery." Next we have the evidence of several other medical men, essentially differing from each other as to the nature and extent of the injury, and so widely, that we cannot decide whether the wounds are trivial or serious, and whether his absence from his seat was from necessity or choice, and this point has even been mooted in the Senate.

These conflicting statements and their source do not concern us at all, but from our professional stand-point we cannot forbear criticising his treatment in the light of surgical science, and this irrespective of the medical men concerned. That he was not a martyr seems to us to have been marvellous, and we congratulate him and his assailant on his extraordinary escape.

First, then, if the wounds were made through the scalp by blows with a cane, these wounds were incised, but lacerated, and the adjacent tissues contused. Stitches were therefore contra-indicated, and ought not

to have been used; nor were we surprised at the bulletins announcing the erysipelas which followed such bad surgery, and endangered the patient's life.

Secondly—That the blows, as described by all parties, produced very severe concussions of the brain, and this was by far the greatest source of hazard to the Senator's life. Now, according to surgical rule, a dark room, a silent chamber, the prohibition of all conversation, and the exclusion of company, should have been enjoined and enforced; thus withdrawing the stimuli of light, sound, mental effort, and society, and absolute rest should have been insisted on as the first condition of recovery. Instead of this course being taken, his brain was speedily taxed to call up the circumstances and witnesses of his attempted assassination, and he was subjected to an inquisitorial examination on these topics. Had his surgeons done their duty to their patient, they would have resisted this jeopardy to his life, though urged by reasons of State, by appealing to a "higher law;" and, if necessary, had they employed a "gutta percha cane" upon the heads of the intruders, it would have been in proof that they were true to their patient, and we could have forgiven them much easier than we can Mr. Brooks. On the whole, we regard the recovery of Mr. Sumner to be an extraordinary escape."—*American Medical Gazette*.

One of the noblest impulses of man's nature is that which prompts him to overlook the faults of his fellow men, or even to throw a veil over the nakedness of their sinning. But there are times when truth and justice so loudly call for their victim, that even kind and officious charity shrinks from the clamor, and willingly leaves him stripped before the blast of public scorn and contempt.

What high-minded and honorable son of Æsculapius can read the above effusions without the deepest sensations of shame, pity and contempt? Shame, that he should find himself affiliated by a common name with the authors; pity, that humanity should be so weak as to bend thus under the yoke of an ever changing public opinion; contempt, that anything wearing breeches and calling itself a man, should allow its mind to sink so far below the level of propriety and professional decency as to make that press, which it has sworn to devote to the noble cause of science a mere vehicle for hauling away the dirty garbage from a political metropolis.

Think, ye men of science, of the Annual Meeting of the Massachusetts Medical Society being the scene of political fanaticism! Think of the "whole society" rising to give three cheers to the little physio-poet, who had not only volunteered his cacoethic muse against the "brutal violence" of a Southern representative, but had shaped her into an empty, vain-glorious threat against the peace of our common land! Think of a body of scientific men, meeting to cheer the apostate who could thus wantonly debauch science whilst pretending to espouse her chastity! And then think of the editor of a medical journal, which claims to be the exponent of, and champion for those high principles which should govern professional gentlemen, stepping aside from his obvious and sufficiently onerous duties to lend his pen to slanderous tales of "attempted assassination," and wanton insults to medical men, who from their "stand-point" of professional reputation, might safely dare him to the scale of public opinion! Think of an editor branding as "bad surgery"

the treatment of a case, from which he was so far removed, and of the nature of which he in plainest words acknowledges himself to be *ignorant*!

Did we think that the conduct of these men would elicit any other sentiment than the scorching censure of all good and true men, we would devote a few pages to the record of overwhelming evidence in favor of "the Surgeons of the City of Washington;" but every heart that is free from the poison of fanaticism, every heart that soars above pandering to leprous appetites, every heart that knows no geographical or political boundary to science, all *noble* hearts, will throb condemnation of the spirit which prompted them to speak and write.

That such men will live in history is most improbable, unless the Pythagorean doctrine be true, and in the transmigration of souls they are found in the shape of the ruthless little moth, preying on the valuable pages, as they would now prey on the fair reputation of their fellow men.

Alas! that it should have come to this; that Medicine at the North is to be drawn up in hostile array against Medicine at the South; that science is to droop under the withering influence of a political fanaticism which has seized the least virtuous portion of our people! Shall it be so? No, our very ink refuses to flow to the record of such a suggestion, and it blushes to write down the names of the rebels this day found in our ranks. In the borrowed language of the physic-poet—

*Dii, prohibete minas! Dii, talem avertite casum!*

[*N. O. Med. News & Hosp. Gaz.*

*Remarks on the Treatment of Intermittent Fever, and the Employment of the Sulphate of Cinchonia as a Substitute for Quinine.* By EDWARD JENNER COXE, M. D., Visiting Physician, Charity Hospital, New Orleans.

The attention of physicians has been for years directed to the discovery of a substitute for the sulphate of quinine, thus far regarded as an unequalled remedy for the treatment of many diseases, besides intermittent and other fevers. Of the many articles submitted to the test of experience, the sulphate of cinchonia appears to have obtained the confidence of the profession to the greatest extent. This article is procured from several varieties of cinchonia, which yield quinine in small quantity.

Dr. W. Pepper, in the *American Journal of Medical Sciences*, for January, 1853, has recorded his successful trials of this preparation, and in other journals may be found reports equally favorable to the value of this curative agent. The sulphate of quinine being an expensive agent, often beyond the reach of those of small means, and apprehension being entertained, from its extensive and annually increasing use, that at some future day there may prove a difficulty in procuring a sufficient supply of the bark which most abundantly yields this valuable remedy, are sufficient reasons for noticing the subject.

Having used during the past year the sulphate of cinchonia, almost to the exclusion of quinine, in the wards of the Charity Hospital under my charge, and finding it in all respects equal as a curative agent to quinine,

I am of opinion that by extending the knowledge of its value, others may be induced more frequently to test its power, and report the result of their experience with it. During the time specified, I have treated upwards of one hundred cases of intermittent fever, in the wards 32 and 33, of every degree of violence and duration, with a degree of success perfectly satisfactory, and although a particular course of treatment was pursued, and other medicines were conjoined with the sulphate of cinchonia, still, as this sulphate was employed in every case, it may, I think, be fairly asserted, that the use of quinine was not required, and that as a substitute, the sulphate of cinchonia proved itself in all respects to that extensively used, and acknowledged remedy. The cases admitted were generally of some standing, varying from one or more months to several years, and as a consequence of the repeated attacks, or the result of an imperfectly cured disease, there was presented every degree of arrangement, and enlargement of the liver and spleen, with some cases of dropsy, and most generally that morbid physiognomy, indicating an impaired, or broken down state of health, the result of irregular habits, conjoined with this disease in a chronic form.

Upon questioning the patients, it generally appeared that the principal remedy upon which reliance had been placed to effect a cure, was frequent doses of quinine, with but seldom, any proper preparatory attention having been paid to the condition of the digestive organs, which in my opinion is indispensable to the effecting a certain and speedy cure. Admitting the fact, that quinine will frequently arrest a paroxysm of ague, and at times prevent a recurrence, it cannot be considered that the temporary suspension of a paroxysm, consisting of the cold, the hot, and the sweating stages, is identical with the overcoming of the disease, of which they are but the symptoms.

The question presents itself, whether at the present day, we do not more frequently meet with the secondary effects of ague and fever, as enlargement of the liver and spleen, dropsical affections, or a general deterioration of health, than was the case prior to the discovery, and introduction into popular use, of the valuable quinine, or whether, in consequence of its acknowledged power as a curative agent, it is not too exclusively trusted to without that preliminary treatment which all must admit to be of the utmost importance in effecting a lasting cure.

We meet with many cases of intermittent fever, of long continuance, in which, at times from the commencement of the attack, there will not have been a regular shake, but rather a sensation of coldness, or shivering, with lividity of skin and nails, followed by fever of greater or less severity and duration, terminating in profuse perspiration. This is known as the dumb ague, it is regarded as being difficult to perfectly cure, but has been equally successfully managed as the more constant forms by the same course of treatment. Before the discovery of quinine, when the cinchonia bark was considered the specific, it was an almost general rule to commence the treatment of intermittent fever by the exhibition of an emetic, and one of tartar emetic was commonly preferred, from its more decided action upon the general system. This, aided by copious draughts of warm water, or chamomile tea, would produce a free discharge of bile from the liver, and with it the entire contents of the stomach, accompanied generally by profuse perspiration. At the expiration of a few hours, generally at bed time, there was given a dose of calomel, whose certainty

of action the following morning, was secured by one or more doses of oil, senna and salts, salts and magnesia, or other cathartic. The experience resulting from the use of so large a number of emetics consecutively in a given period of time in intermittent and other diseases, justifies, it appears to me, the assertion, either that unpleasant consequences do not so frequently result, as we should be induced to infer from the rarity of their use, and the apprehensions entertained of them by some physicians, or that the addition of the articles conjoined, had the power of preventing their appearance.

In pursuance of this course of treatment, at bed time, there was ordered from ten to fifteen grains of calomel, combined with eight or ten of Dovers' powder, or two or three of the modified blue pill, to be followed the next morning by a moderate dose of oil, or other cathartic, if required.

The sulphate of cinchonia was now brought into use most generally, as follows :

Rec. Cinchonia Sulph. ʒssadʒj,  
Syr. Rhei. ʒj,  
Liq. Arsenici Fowlerii, ʒis,  
Tr. Gentian. Comp ʒiii,  
Tr. Cinchon. Comp ʒiiim.

Dose, two tabespoonfulls every two hours during the day. A continuance of the same for a few days, with some rather longer, succeeded in overcoming the disease, which in all probability would not have been the case, had the preliminary remedies been omitted. In addition to this remedy, there was given during the day, at regular intervals, a strong infusion of the best tonics, as bark, snake root, calumbo, quassia and aromatics, and also in some cases a teaspoonful of a powder composed of iron, bark, ginger and cinnamon, two or three times a day, taken in the tonic drink.

After having fully verified the efficacy of the above combination, I used after the preliminary treatment, the sulphate of cinchonia, by itself, in doses of from ten to twenty grains two or three times a day, at times conjoining with it a few grains of Dovers' powder and rhubarb, as might appear indicated. The same results have followed its use in this manner, and it is worthy of remark, that in no one instance was there produced any of those unpleasant sensations, so constantly complained of, after even moderate doses of quinine, no uneasiness in the head, no ringing of the ears, no deafness. Occasionally, with the view of more thoroughly testing these points, it was given, when considered admissible, in the dose of two scruples, and in a few cases, of one drachm, with similar results.

The properties of the two medicines, being in other respects equal, this difference, if found when tried by others, to prove a constant rule, must certainly in many cases, give the sulphate of cinchonia a superiority over quinine. During the sickness and convalescence, the diet was principally of a farinaceous character, with, in some cases towards the end of the treatment, a small quantity of alcoholic or malt liquor. With hospital patients it is clearly impossible to assert that all would escape a return of the disease, some leaving as soon as apparently cured, but as many of the more severe cases remained in the house some time after the cure was effected, without the least appearance of a return, it is but fair to conclude that such was the case most frequently. In view of the above facts, I

think it may be asserted, that the sulphate of cinchonia has displayed curative powers, quite equal to those of quinine, and as there is a very material difference in the price of the articles, the promulgation of the above facts may induce others of the profession to test them in other places, and found to correspond in point of efficacy, in no trifling degree benefit the pecuniary condition of charitable institutions.

It may not be amiss to state, that in many cases, where it was requisite to strengthen the system, without regard to any particular disease, the sulphate of cinchonia has been given in conjunction with the ordinary tonic tinctures, with uniformly good effects.

A few words in conclusion, as to the necessity and immediate advantage of administering emetics in many diseases, may not be amiss. With few exceptions, there was discharged from the stomach one or two basins full of offensive bilious matter of every grade of color, and it is clear that had such remained in the system, until removed by purgatives, through the intestinal canal, not only would the cure have been materially prolonged, but the liability of exciting irritation or inflammation in the viscera, increased, far beyond what might occasionally result from any emetic that might be administered.—*N. O. Med. News & Hos. Gaz.*

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*Extraction of Needles, &c., from the Human Body.* By ELISHA P. FEARING, M. D., of Nantucket.

[Communicated for the Boston Medical and Surgical Journal.]

In July, 1855, I was called to a single woman, aged 44 years. She was quite fleshy. She complained of great pain and tenderness in the lower part of the abdomen. The lady with whom she had resided for the last fifteen years, informed me that she was insane about ten years ago, and a part of the time in close confinement, but since then was thought to have been rational; that for several years past she had had frequent turns of vomiting a substance about as thick as paint, of a chocolate color (in the opinion of the medical attendant, not blood), and large quantities of bloody pus and other matters; that she had discharged something of the kind *per annum*, and that not long before I was called she had discharged, and had taken, from the rectum *several pounds of a light mahogany-colored substance, in masses or lumps*, of various forms and sizes; also, that about the same time she was troubled with a hard and rather painful swelling in the region of the sigmoid flexure, attended with a sense of weight and dragging down, especially when lying on the opposite side; and that the swelling and pain had gradually subsided as the lumps were discharged.

Believing there were more of these lumps, I prescribed an active cathartic. The first discharges were feculent, followed by more of the same kind of lumps; these last completely filled up the rectum, and caused great suffering. It was with difficulty I removed the largest, which measured *six inches in circumference*. Upon the surface of them was some mucus, and lard, which was used to facilitate their removal. They



had evidently been permeated by an oil. Nothing of the kind has since been discharged. A specimen has been analyzed by C. T. Jackson, M. D., State Assayer, and the result at which he arrived is, that "this mass of matter is *dried brown ochre paint*." He "detected linseed oil."

A few days after the cleaning out of the paint (so called), I removed a common sewing needle, about an inch below the ensiform process. She has since suffered much from nervous irritation, caused by numerous needles, as the event has proved. For, during the last twelve months, *one hundred and twenty-three needles, twelve halves or fractions of needles, and two headless pins, have been extracted*. A large portion of them were taken out from the region of the stomach and abdomen, following in the track of the colon, and many in the immediate neighborhood of the sigmoid flexure. They have also been extracted from other parts of the body and a small number from the limbs; viz., just below the breast, back, loins, just below the left hip, upper and inner part of the thigh, labia pudendi, urethra, perinæum and sphincter ani. One only has been removed from below the knee. One of the largest needles was removed this day, from just below the navel; it has troubled her for a long time, and was situated deeply and obliquely, with the point towards the surface, the point having been bent in the extraction. Some few more can be just felt, but they are too deep to be extracted at present.

The needles varied in size, and were found in different positions; many were perpendicular to the axis of the body, with points presenting—others more or less oblique—some with eyes broken, some with points broken, and a few without either points or eyes. Probably some were broken off when extracted, as were some of the needles. A few of them have undergone little or no change; but by far the largest number are slightly oxidized, having lost their brightness and become brittle; others are more or less corroded. This difference may be owing to the degree of purity of the metal and their locality.

The motion of the needles, no doubt, depended very much upon their situation, and the action of the muscles; for strong muscular action (no matter from what cause) was almost sure to bring forward a crop of needles—that is, force them nearer to the surface, some very near, while others were scarcely perceptible, requiring a rather tedious and painful operation. Eight is the largest number extracted in one day, or at one visit.

A question naturally arises, whether the needles and paint were swallowed, or introduced from without? This question cannot be satisfactorily solved, for I have not been able to obtain information affording the least light in regard to this subject, and must therefore rely upon circumstances and facts as they have become manifest.

Not the least mark or trace of a needle, or any other thing, having been forced through the skin from without, has been discovered, notwithstanding the frequent minute examinations made for that purpose; and within twenty-four hours after such examinations, several needles have been taken out from the part of the body examined, having the same blackened appearance. Had they, a few days previous, been forced through the skin, it would seem almost impossible that the trick should have escaped detection. There are other facts and circumstances which would seem to sustain both sides of this question, but for the want of time and space they must be omitted.

Taking all things into the account, I am inclined to the belief that she did swallow, at least, a portion of the needles (probably in papers), and large quantities of the paint, and did introduce some from without, and, in fact, stuff herself not only with these articles, but with some small pebbles of quartz, which had been taken from the vagina before I saw her, and with whatever else came to hand. Whether sane or not at the time, is not known, in all probability not; for of all things needles would be about the last any sane person would think of swallowing, or forcing in from without in such numbers. It has occurred to me, whether, if the needles were swallowed, they might not have remained a long time in the patient, and thus been preserved, or protected from the corrosive effect of surrounding substances. I have recently seen a part of a needle, which was taken from the forefinger, nearly six months after it was accidentally forced in. It had not changed at all, except having lost its brightness. I have scarcely a doubt that they may, under some circumstances, remain in the body for a long time, perhaps for years, without much change by oxidation. In regard to this very extraordinary case of needles, I will, in conclusion, just observe that, no doubt, a very small number of needles remain to be extracted, which are not accessible at present.

The needles and a specimen of the paint have been deposited in the Cabinet of the Boston Society for Medical Improvement.

*Nantucket, Mass., July 26th, 1856.*

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*Laceration of the Cervix Uteri. From Preternatural Rigidity.* By J. R. FREESE, M. D., of Bloomington, Ill., Professor elect of Surgery, in the Western Law and Medical College.

A case of this character fell under my care a few days ago; and, as it is a rare condition of things, and is liable to give a good deal of anxiety to the uninitiated, I have concluded to report it for the benefit of my younger medical brethren.

On the 22d of May last, I was called to attend Mrs. C. who was then in labor with her second child—the first having been born about two years previous. Upon examination, per vaginam, I found *two* distinct openings into the womb—one anterior to the other. I passed my finger in at the one, and out at the other; hooking the lacerated part over the first phalange of the index finger. The septum, or lacerated part, seemed to be nearly a half inch broad, by an eighth in thickness. Upon a still closer examination, I found the posterior opening to be the natural *os tincae*, while the anterior was the lacerated opening. The presentation was natural; and, as the labor progressed, I found the anterior opening more dilated than the posterior, and supposed that the fœtus would emerge through that opening. I hesitated for a few moments, whether to draw the septum forward, and thus try to have the child pass through the natural os, lest the other one might be still further lacerated, or let it take its own course, and finally decided upon the latter. If, thought I, the rigidity of the os was too great in the first instance, it is probably too great still; besides, the labor would be greatly retarded, as the natural

os was so far posterior that the vertex would press unduly against the sacrum, and thus the fœtus would be thrown out of Carus' curve, the line of which seemed to correspond with the lacerated opening.

The labor continued about six hours, when a "man-child" was born into the world—which unfortunately, however, proved to be "before its time," probably about a seven or eight month's child. It was with some difficulty that I established respiration—every care was taken, but the child lived only about twelve hours.

The expulsion of the placenta was arrested by the septum, and I had to pass my hand into the vagina to release it, before it could be brought away.

The woman had a strong disposition to peritoneal inflammation; but, by timely assistance, this was prevented, and she was "up and about" in nine days.

I learned from her that, in her first confinement, she had very strong and long continued pains, but that "*suddenly*," to use her own expression, the child was born. Her medical attendant gave her no reason for it, and the probabilities are that he mistrusted not the undue rigidity, and knew nothing of the rupture in the cervix uteri. Her convalescence was tedious, and she still suffered more or less from weakness, pains in the back, an uneasy sensation about the womb, etc.

The *rationale* of the case I presume to be, that, previous to her first gestation she had *anteversion* of the womb, together with *extreme rigidity* of the os uteri, both of which conditions continued to a certain extent, up to the time of her confinement. Then, the mouth of the womb, resting against the sacrum, together with this extreme rigidity, prevented the child from being born *per vias naturales*, and hence the rupture, *anterior* to the mouth, through which the child was "*suddenly*" born. This rupture finally healed at its edges, leaving, however, a *double* opening into the womb—through the false one of which the last child was born, and all subsequent ones will be, if she continues in the "*good old way*."

This was not a case of *occlusion* of the os uteri, as I could readily pass my finger in or out of the natural os. Neither do I think that it depended on *obliquity* alone, as Velpeau, Baudelocque, Desormeaux, North and others think that many cases of ruptured womb do; but it was a consequence, in my opinion, of the two abnormal conditions combined, viz: *obliquity* and rigidity.

If her medical attendant, in her first confinement, had known the exact condition of parts, perhaps he might have prevented the rupture, by elevating and supporting the fundus of the womb—drawing forward the mouth, administering nauseating dose of tartarized antimony with opium, bleeding, *ad diliqueum animi*, if necessary, or, even incising, with a probe pointed bistary, one side of the cervix uteri; but, as he knew it not, and did nothing, Nature took the case in her own hands. made and an incision in the "*natural way*," and left two openings instead of one, into the great *ma:rix materni*—that wonderful "*fountain of life*!"

June 18th, 1856.

*Observations on Indigenous Medical Plants.* By ARIEL HUNTON, M. D., Hyde Park, Vt.

Since my last paper on the medical virtues of our indigenous vegetables, I have selected a few more, which I will describe :

*Erechtites hieracifolia*, the *Senecio hieracifolius* of Linnæus; *first growth fireweed*, belonging to the class Syngenesia; order, Superflua. An annual grooved, juicy, herbaceous stem, abundant on recently burned lands. It is aromatic, and has a slightly fetid odor. The most use I have made of the article, is to direct patients troubled with hemorrhoids, to simmer the stalks and leaves in lard, and apply the ointment in this disease. It usually gives relief.

An essential oil is extracted, and used for the same purpose. It possesses alterative properties, and is used as a domestic remedy in the summer complaints of children.

*Epilobium angustifolium*.—*Second growth fireweed*, wicapy, rosebag, &c. This article was omitted in my description of vesicatories, for the very good reason that I could not class it until it was in blossom; the class is Octandria; order, Monogynia; it grows to the height of four to six feet; the flowers are showy, of a pink color; in a long spike; will be in blossom from the first of July to October; the capsule is two to three inches long, about the bigness of a darning-needle; the seeds armed with an egret. The recent root, bruised, is used as a counter-irritant, and will vesicate; a decoction of the root and leaves is used in diarrhœa, dysentery, and leucorrhœa, as a tonic and astringent.

*Menyanthes trifoliata*, buck-bean, marsh-trefoil; class, Pentandria; order, Monogynia. There are in this vicinity several bogs where this article grows in abundance; one gill of an infusion, of half an ounce of the root to one pint of water, will usually operate as a cathartic and emetic.

In small doses it is in use as a tonic and alterative in scrofulous, and most cachectic affections.

*Tiarella cordifolia*, miterwort, coalwort; class, Decandria; order, Digynia. An infusion, in cold or warm water, makes a palatable febrifuge. I have used the article more than forty years.

*Saponaria officinalis*, soapwort, bouncing-bet; class, Decandria; order, Digynia. Soapwort is an alterative, used in strumous and skin diseases; antisiphilitic in gonorrhœa and gleet; will excite the torpid liver; and stimulate the bile ducts; the extract is in use; dose, from grs 10 to 20.

*Polytrichum juniperum*, hair-cap moss, bear's bed; class, Cryptogamia; order, Musci. This article, not having a place in the *U. S. Dispensatory*, and being a useful ingredient, is more used in domestic practice than by the faculty; I give it a passing notice.

Our botanists, in their descriptions, locate it in dry woods; it is abundant on all our poor knolls, in pastures, and waste uncultivated lands.

It is quite a sure diuretic, and has been used in decoction, as a domestic remedy in what the people denominate the *gravel*, by which they mean disury, or any disease of the urinary organs.

When I am treating a disease of the above description, the friends of the patient will recommend a decoction of bear's-bed, and extol its powers as a diuretic. Being always willing to witness the effect of our indigenous vegetables, I have frequently seen marked effects from its exhibition, relieving the pain and anguish, and causing an abundant flow of urine.

*Stricture of the Rectum.* By ALANSON ABBE, M. D., Boston.

Mrs. C. R. D., aged 24, the mother of one child, three years of age, has for many years been afflicted with obstinate and unyielding costiveness, attended with hæmorrhoids unusually painful and distressing. Her bowels were evacuated, usually, once in eight or ten days, and only by the aid of cathartics. Her general health was much impaired; there were daily paroxysms of severe pain in the head, giddiness, pain in the loins and anus; she was excessively irritable, though her appetite and digestive organs were uniformly good.

April, 1856.—I was called to see her. On examination, I found five large hæmorrhoids on the verge of the anus, from which, apparently, issued a constant discharge of pus. The hæmorrhoids were removed by ligature, with no unusual symptoms, and healed kindly and well, yet the discharge continued undiminished. On examination per rectum, I discovered a stricture of the rectum, about two and a half inches from the sphincter ani, the diameter of which, under force, did not exceed one-fourth of an inch. Pus oozed constantly through this orifice. I was wholly unable to ascertain the condition of the intestine above the stricture. On reflection, I concluded to dilate the stricture, instead of dividing or cauterizing it, and for this purpose obtained of Dr. Codman seven conical tents, made of the bark of slippery elm, as recommended by Dr. Storer.

May 5th.—Introduced an elm tent into the stricture, letting it rest on the inner surface of the sphincter ani, and secured it by a T bandage, a compress of cotton resting upon the anus.

May 6th.—Early in the morning the tent was discharged, with a small portion of faecal matter. At 11, A. M., another tent of larger size was introduced in the same manner, and secured as before.

7th.—The tent came away this morning, followed by a moderate discharge of fæces. I introduced another tent of still larger size, and secured it in a like manner as the others.

8th.—The discharge of the tent passed this morning as the others had done, with very little faecal matter, but a large discharge of pus. Directed an enema of mucilage gum acacia, and the comp. inf. senna,  $\mathfrak{z}$  iv.

9th.—On examination of the condition of the stricture, found it enlarged sufficiently to admit my fore finger, with some force, to the first joint. Introduced the fourth tent, the largest diameter of which was about an inch. While introducing it, felt the stricture suddenly give way, presenting no further resistance. This instant yielding of the stricture produced a temporary faintness of the patient, which passed off in three or four minutes.

10th.—Very early this morning, the disposition to use the stool became so urgent, that she was compelled to remove the bandage and let the tent pass, and with it came a free and copious discharge of fæces and pus. On examination, found the stricture nearly overcome. Above it, as far as the finger could reach, the intestine was indurated, granulated and ulcerated. The discharge of pus was evidently from this source, occasioned by retention of fæces above the stricture.

19th.—Patient reports herself well; has a free and easy discharge from her bowels, daily. She discovers no signs of purulent matter in her evacuations, or on her linen.—*Boston Med. and Surg. Journ.*

*Iodine as an Emmenagogue.* By DR. SHOEMAKER, of Columbia, Illinois.

I am just "Old Foggy" enough, to be surprised that Young Physic should give us another emmenagogue to add to the long tailed list left us by the venerable Chapman, and many other well learned men of by-gone days.

Some one (I think it was W. P. Dewees) has defined menstruation as "a periodic discharge from the uterus of a colored fluid resembling blood, liable to be interrupted by *pregnancy, suckling and disease!*" I, with many others, wiser than myself, accept this definition and act accordingly—that is, let the subject alone during the two first and natural causes of arrest, and try to remedy the last, let it be what it may. A *supposed* "rheumatism of the uterus," as suggested by some—then, if we are not on the hobby of Alkali and Acid, as being, in turn, cause and cure—perhaps we might give some of Dewees' Vol. tinct. of Guaiac, but not Iodine! Is the patient rather an imprudent one, who, about the time the flux should appear—in good health and full habit, with skin soft and perspiring, intentionally or otherwise gets her feet wet, or from some cause takes cold—amenorrhœa or dysmenorrhœa is the consequence, headache, injected eyes, &c. We give her some warm tea, sit over a hip-bath, and put the legs to the knees in a mustard bath: three fluxes ensue, one from the nose, one from the skin, and one from the uterus—she is well! but has not taken or required any Iodine!

Old Fogies do not believe that typhus fever is *caused* by an ulcerated condition of the abdominal glands, but *vice versa*—just so amenorrhœa and dysmenorrhœa are effects, not causes. Young Physic may expect to relieve many patients, whose health is bad, and who suffer from suppressed or painful menstruation, by iodine, or any other of the so-called emmenagogues. We must seek to restore the general health by remedies indicated by the symptoms present; succeed in this, and the amenorrhœa will be cured. It is true, however, that cases may and often do occur that iodine is the *remedy indicated!*

Cullen and most others who diligently searched for what they thought *should* exist, viz: a true emmenagogue, finally gave it up in their minds, but really found it in a pair of flannel drawers with a waistband that covered the whole pelvis—in rusty iron, that improved the blood, when aided by exercise, beef-steak, and hilarity! But iodine is good, too, in *some cases*.

Dysmenorrhœa is often caused by one of the hyperæmic conditions of the uterus—say determination to the part retarded in its transit, (congestion,) or by determination; the circulation in the part, partly increased, and partly diminished (inflammation); in these cases, what are the indications—iodine, or the lancet and anodines?—*St. Louis Med. & Surg. Journal.*

## EDITORIAL AND MISCELLANEOUS.

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With this No. of our Journal we send out the announcement of our third course of Lectures. We are satisfied that the accompanying Catalogue of Students and graduates of the last course shows an increase upon the first sufficiently large to warrant us in the conclusion that the Atlanta Medical College will very soon number a class equal, with very few exceptions, to any school in the Union. This is said in no boasting spirit. The Faculty, it is true, have endeavored to discharge their duties as teachers—others have done the same; and we are glad to see all institutions prosper that afford the proper amount of medical instruction. We hope no jealousy toward sister institutions will ever be indulged by any member of the Faculty here. If our position and facilities for instruction, make it to the interest of the student to take a course of lectures in Atlanta, we expect them to do so, not otherwise. If we fall short of other colleges in the curriculum of studies, or in affording the proper means of rapid advancement, we do not ask, we do not expect, we do not desire the medical student to waste his time and money with us. If we fall below the standard of requirements adopted by other institutions, we could not expect their confidence and respect, nor the patronage of intelligent students of medicine.

The College building, which for want of means has progressed tardily, has now its walls complete; and with the fulfillment of contracts already made for other work, which will be rapidly carried on, ample lecture rooms, dissecting room, museum, &c., in a substantial stone building, will be afforded. Though the rooms occupied heretofore by the kindness of our city authorities, were spacious and comfortable, the want of laboratory, and permanent and suitable dissecting rooms was felt by those requiring such apartments during the College exercises. As the announcement makes known, all things will be in readiness for the next course.

## TO OUR PATRONS.

We must take the liberty of again calling the attention of our subscribers to arrearages due for subscription. We do not ask confidence in our pretensions till we give evidence which we think should warrant it. We know that Journals have *failed*, and cash subscribers have been *squeezed*; therefore, although cash terms were advertised, subscribers were not held strictly to cash during the publication of the first volume. Now, as this is the 2d No. of the 2d Vol., we hope that our friends, who are in arrears, will remember us *pecuniarily*, and remit for vols. 1 and 2, if convenient. We know the feelings of subscribers. We have been, and are now subscribers. The amount is small, too small to engage much thought in those owing these individual and separate amounts. Yet, think, friends! the aggregate of these separate small amounts is to pay the publication of a Journal which costs, in cash, every month, the sum of about ninety dollars. With our present list of subscribers, this monthly debt could be easily discharged, without inconvenience to our patrons. Therefore, brethren, send in these small amounts, for which we hope you have value received, and relieve the Faculty, under whose control the Journal is published, from a burthen they have patiently shouldered for twelve months. We are willing to contribute the labor editorial, which is no small matter, without the hope of pecuniary remuneration, and ask only that due subscriptions, sufficient to pay the publication, be sent in.

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We are in receipt of "Essays on the Physiology of the Nervous system, with an appendix on Hydrophobia, by Benjamin Haskell, M. D., of Rockport, Mass.," a work of 87 pages, in pamphlet form, containing three essays and appendix. The character of the essays, and the style of the author may be learned from the following extracts. He says:

"I regard the nervous system as simple and uniform in its function, as in its structure; that, like all the rest of the bodily organs, it is by virtue of its physical properties, which are one and the same throughout all its homologous parts, it is of use in the body, and subserves the purposes of the mind. If ever it is proper to speak of vital properties, in relation to those activities by which its growth takes place, its integrity is main-



tained in health, and it is repaired in disease. But when it is formed, the nervous fibre, whether it is an attenuated cylinder containing fluid, or a solid, performs the same office wherever it is situated, whether in the brain, spinal marrow, nerve of sense or of motion. And that office is precisely what its particular structure adapts it to perform. Such is evidently the teaching of analogy, reason and common sense. The same is true of the vesicular portion; whether it forms a ganglion at the point where the nerves that go to an organ of sensation, meet with those that proceed to the muscles which move that organ, or occupies the centre of the spinal cord, or is distributed over the surface of the convolutions of the brain, we recognize nothing but an arrangement on physical principles by which arterial blood is brought into close relation with the nervous fibre; and whatever is the natural effect of the action of arterial blood as it passes to the venous state, (in all probability a dynamic effect,) on the nervous fibre, that we are bound, by all the rules of right reasoning, to consider the true and the only function of the vesicular portion. Nothing can be more absurd than to make a mere difference of form, where the same structure is brought into similar mechanical relations with another structure, a ground of difference in function, vital or otherwise.

“Of these physical properties of the nervous system, the mind avails itself, in establishing its relations of sensibility and motility with the body. And it does this, not by associating its faculty of sensibility as a whole, or its faculty of motility as a whole, with any part of the nervous system; but *particular* sensations and classes of sensations, *particular* motions and combinations of motions, are associated with the physical excitements of *particular* portions of the nervous system—a fact exemplified by the special senses, and the movements of respiration.

“These associations are incidental to *two fundamental and correlative laws or general principles*, which regulate the union of the mind and the body. One of these principles is mental, the other physical. The first is, that mind governs the motions of the body as directed by sensations. The second is, that the organ on which the impression, giving rise to the guiding sensation, is made, (if not in immediate juxtaposition,) is connected by nerve with the muscle to be contracted in order to move the organ.

“These two principles, which I think can be shown to be universal facts, constitute the key to the true physiology of the nervous system. With reference to the first of them, it is assumed that the action of the mind, neither in its sensitive nor voluntary department, is limited to those feelings or those volitions, which it stops to register in consciousness and thus re-

members, but extends to all those phenomena, whose character of adaptation, and whose want of harmony with physical laws, prove them to be of the mechanism, or else to lie in a sphere remote from the penetration of our faculties, and one not given us to explore.

"The object of the union of the muscle to be contracted with the sensitive organ, appears to me to be, to enable the mind to avail itself of the physical property of the nerve whereby the two organs are brought, as it were, into apposition. Such would be the result, were we to suppose the physical quality of the nerve to be a power to receive and propagate minute impulses. Impressions from without would then be transmitted through the nerve and repeated on the muscular apparatus. And the attention of the mind, as held in sympathetic connection with the muscle, would be roused, just as it is, when an impression is made directly on the muscle, in any one of the peristaltic actions. All the forms of motion in the body are thus reduced to the same mechanism; and we are spared that contradiction of the law of parcimony,\* which we make when we attribute one set of motions to the direct action of impressions, and another to influences generated in, and transmitted through, a nerve. In other words, the mind wills to feel at one and the same moment, the muscle that contracts, and the sensation under the direction of which it contracts; and it does this when the former is connected with the sensitive organ either by nerve or immediate contiguity.

"In like manner, it corresponds with the same view, to suppose the office of the ganglion or vesicular matter to be, to unite in one the nervous fibres passing from various surfaces of relation, as the muscles on one hand, and the organs of sense on the other. This may be conceived to be accomplished by the action of the arterial blood as it becomes deoxygenated, giving rise to minute impulses which excite a vibratory movement on the fibrils, and the interference of a new impression with which, is disseminated and felt throughout the whole mass. Thus the ganglion on the simple nervous cord may serve to unite the fibres that lead from the surface of touch of a segment, or small member, with the fibres that lead from the muscles that move that segment or member. The grey matter in the centre of the spinal marrow, unites contiguous segments and organs in associated relation, and that of the surface of the convolutions controls these minor centres, and unites in one all the nerves distributed to all the voluntary muscles and to all the organs of sense. Whether this be the true office of the blood in the grey matter, or not, one

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\* This term is happily assigned by Sir Wm. Hamilton to the old law, "that no more causes are to be introduced, than will account for the effects in philosophizing."

thing is pretty evident, viz : that the blood generates nothing, whether in the form of electricity, nervous power, or nervous influence, which is transmitted to the muscles. For when a nerve has been separated from its ganglionic connections some time, it will, when irritated, occasion contraction in the muscle to which it leads ; a fact which proves that the ganglionic centre must act on some property already existing in the nerve, and affords nothing to the medullary fibre which it had not before.

"Thus, the conclusion we come to, is that while the nerve fibre connects the organs of sense with the muscle ; the ganglion connects the different fibres from a number of points of a sensitive surface, with fibres leading to a number of muscles. Were there but a single organ of sense, and a single muscle to be contracted in consequence of sensations arising from impressions, on that organ of sense, the two would be united by a nerve without a ganglion. This conclusion, which establishes the uniformity of action of the nervous system, prepares the way for an investigation of the mode in which nature builds up the nervous system, and associates the powers of the mind with it."

Again, in comparing the views thus advocated by him, with those of Sir Charles Bell, he says :

"The common belief of vital properties of nerves, which this view opposes, derives its chief support from the authority of Sir Charles Bell, whose researches are well known ; and a comparison of the principles just laid down with certain physiological and pathological phenomena, in order to show the manner in which these last are elucidated by them, would naturally lead us to advert to those of that writer. In the first place, then, I would state, that the conclusions of Sir Charles Bell never flowed legitimately from his premises. In his first experiments on the fifth nerve, before he had any theory to support, or rather before his theory had assumed a definite form, he drew the inference that this nerve was for motion. This, therefore, was the natural inference ; and though subsequently, when on finding that it did not tally with those he drew from his experiments on the spinal marrow, he withdrew and reversed it, still there were residual phenomena, which threw serious doubts on its correctness in its amended form. The loss of all power in the lip, in an animal whose chief sense of touch resides in the lips, and the chief motions of which, would naturally be associated with it, the dropping of the mouth, and the drawing it to one side, seemed to indicate that something more than sensation was destroyed. Many labored attempts have been made to reconcile this contradiction by his followers. But they have not been successful. Contractions

of the iris have also been produced by irritating the fifth; some distortion is produced by paralysis of that nerve; it sends fibres to muscles, and there are other signs of its agency in contracting certain muscles of the face, particularly the eyelids. Now all this is readily explicable on the supposition that the mind employs the fifth for touch, and those notions which it performs under the direction of touch.\*

“Again, if we pass from the nerves of the face, to the spinal marrow, we find his experiments at once in conflict with those of Magendie and Bellingeri. While Sir Charles inferred that the anterior cords were for motion, and the posterior for sensation, Magendie inferred that the former were for motion chiefly, and the latter for sensation chiefly; and Bellingeri that the first were for the movements of flexion, and the last for those of extension. Scarcely anything deserving the name of an attempt to reconcile the results of those of the English, with those of the Italian physiologist, has been made. But since the discovery of the reflex function, Dr. Carpenter has endeavored, by the aid of special pleading and patchwork, to make the others coincide. By the reflex function, he explains, with some plausibility, how motions are produced, when, after section, the proximate ends of the posterior cords are irritated.† But when he explains how it is that sensation takes place through the anterior cord, he assumes the thing to be proved, and then makes use of it to prove itself. For he supposes that sensitive fibres from the posterior cord pass up from the point of union of the two cords towards the spinal marrow, not because they have been traced anatomically, but solely on

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\*For a full account of Sir Charles Bell's errors in relation to the fifth nerve, the reader may consult James O'Beirne's analytical correction of that writer's views respecting the nerves of the face, re-published, in this country, in the “Register and Library of Medical and Chirurgical Science,” for 1884. Dr. O'Beirne comes to the conclusion, that either the fifth nerve must be allowed to have some other office than touch, or the motor portion must extend to branches of it, not now conceded by anatomists—which last alternative he adopts. Indeed it is the chief object of his essay to prove it. The view above given accords with the first. In one of the observations quoted by him, Sir Charles himself expressly admits “a power of holding by the lips, independent of the seventh nerve.”

†The inconsequence of this conclusion is shown by an experiment of M. du Bois-Reymond. “If any motor nerve be selected which divaricates into two branches, (as, for example, the sciatic nerve of a frog, which divides above the bend of the knee into the tibial and peroneal branches,) and a galvanic stimulus be applied to either of these branches, this having been first divided above its insertion into the muscles, the electrotonic state will be developed, not merely in the portion of the trunk continuous with that branch, but also in that which is continuous with the other branch, as will be made apparent by the contraction in the muscles supplied by the latter.” (*Carpenter's Physiology, Fifth American Edition*, pp 653-4) Here we have an undoubted instance of an irritation being transmitted through a nerve, when severed in part from its natural connections, in a manner opposite to the physiological mode of such transmission, as generally understood. Can any one say, that when the proximate ends of the posterior cords are irritated, the resultant motions through the anterior are not of an analogous character?

the ground that dividing the posterior cord puts a stop to the exhibition of sensation when the anterior is irritated. The true question is, whether there *are* any fibres either in the anterior or posterior cords by whose vital endowments sensation takes place. Is it not most natural to suppose, that irritation of the cut end of the anterior cord occasions convulsive or painful contractions of the muscles, and the connection being maintained by the posterior, the animal exhibits indications of suffering?"

He thus alludes to the "*corroboration of the views advanced.*"

"A further and somewhat singular confirmation of the idea above given of the functions of the anterior and posterior columns of the spinal cord, is derived from the following observations of Sir B. C. Brodie on injuries of that organ :

"The lower limbs are more frequently paralyzed than the upper, even when the lower part of the cervical spine has been injured. This circumstance is remarkable, as it is contrary to what happens when the functions of the spinal cord are interrupted in consequence of caries of the cervical vertebræ. In these last cases, the paralysis is often complete in the upper limbs for many weeks, or even months, before it extends to the lower. Paralysis of the upper limbs has been known to follow contusion of the dorsal vertebræ.

"These facts, which seem inexplicable on the common theory, are easily understood, when we consider that caries, affecting the bodies of the vertebræ, must involve the anterior columns some time before the posterior; whereas, in injuries, the processes are usually the first to suffer fracture or dislocation, and the posterior columns which are most concerned in the movements of the lower extremities, being nearly contiguous, will soonest feel the effects, and will therefore be most likely to be disturbed in their function.

"In No. 19 of Braithwaite's Retrospect, is an account of a discussion before the London Medical and Chirurgical Society, in which Marshall Hall took part, relative to a case in which there was palsy confined to the arms. The doctor was evidently at fault in his explanation of the case, simply because there was not room for it in his philosophy. According to his ideas, it was "almost impossible to imagine disease of the spinal marrow so situated as to induce paraplegia of both superior extremities, without involving in its effects the parts situated below." After what has been said above,\* it is unnecessary for me to enlarge upon such a case."

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\* \*On the connection between the motions of the arm and the specific senses, and through them with the cerebrum and anterior columns.

Again, on the causes which contribute to the reception of Bell's theory :

"The observations made in the two preceding divisions, enable us to estimate at their true value the experiments and reasonings of Sir Charles Bell, and the influence they have had on the subsequent progress of physiology. "The key to the system," says he, "will be found in the simple proposition, that each filament or track of nervous matter has its peculiar endowment, independently of the others which are bound up along with it; and that it continues to have the same endowment throughout its whole length." Here was his fundamental error. Long previous to his time, it had been suspected, from the occasional occurrence of paralysis of motion without loss of sensation, and the reverse, that different nerves were somehow subservient to these different functions. But the old physiologists who held this notion did not, as a general thing, any the less believe that both motion and sensation were functions of the mind, and not of the nerves. To him it was left to transfer, by a single stroke of his pen, these powers, from the province of the mind, and locate them in the nerves, as functions, springing from these imaginary vital endowments. And we look in vain in his works for any process of reasoning, grounded on physiological or psychological facts, to warrant the step. It was an assumption, neither more nor less; and it was an assumption, the necessity for which, it was incumbent on him to show, before he proceeded to experiment. Had he done this, his experiments would have been pertinent to prove *which* class of nerves were for motion, and *which* for sensation."

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*On Lactate of Zinc in Epilepsy.* By M. HERPIN.

(Bull. Gen. de Therap. Nov. 1855.)

M. Herpin points out the fallacy of deductions from cases treated *en masse* by any remedy, without classifying the cases, and taking the prognosis into consideration. He divides cases of epilepsy into three groups. 1. Where the prognosis is *favorable*. This embraces cases in which there have been less than 100 attacks. 2. *Little favorable* cases, where there have been from 100 to 500 attacks. 3. *Unfavorable* cases, where there have been above 500 attacks. The duration of the affection, together with the age and sex of the subject, also influence the prognosis. All things being equal in respect to the number of fits, the most recent cases are the most favorable. Under

five months' duration, the chances of recovery are twice as great as from five months to a year. After ten years, success is rare. Of all ages, old age is the most favorable; then youth and infancy; and least of all, adult age. In M. Herpin's hands there have been twice as many failures with males than with females. Adult men are most unfavorable subjects. To apply this sort of division to the cases treated by lactate of zinc:—of 41 epileptics, the treatment was only sufficiently advanced in 35 for any decision as to its effect being arrived at. Of these 35, 15 were favorable cases, 12 little favorable, and 8 unfavorable. Of the 8 unfavorables, 2 have improved to an extent which militates strongly in favor of the remedy. Of the 12 little favorable cases, in 2 children, aged respectively eight years and twenty-one months, the fits were suppressed; and a remarkable amelioration took place in one man. Of the 15 favorable cases, 4, in which various other remedies had failed, were influenced by the lactate; one of these had suffered 90 attacks in fifteen years and a half; a second, aged forty-four years, had symptoms of commencing general paralysis; a third, aged four or five years, had a hydrocephalic head; and a fourth, which had lasted three years and a half, was otherwise favorable. In 6 of the remaining 11, the attacks were suppressed; and of the 5 others, 3 have had the intervals so much prolonged, as to afford hope of complete cure on continuance of the remedy; the remaining two were amended. The remedy was given for a period of from five or six to twelve months.—*Med. Chir. Review.*

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### *The Abortion Trade.*

There is something frightful in the perfect *sang froid* with which women call upon the physician to relieve them from the duties of a mother. They walk into the office of our most honorable practitioners, state their case with the same ease of manner which would mark their description of a headache, and appeal for assistance with as perfect assurance of their right to it.

This sentiment is almost universal in the community, and it is nothing uncommon to see a most virtuous indignation on the part of the suffering female, as she listens to the refusal of her medical adviser to take any part in such an undertaking.

We have no space or disposition to discuss the morality of this infamous trade, but we do wish to enter our protest against those practitioners who accommodate themselves to this depraved moral sense of the female. We have an indirect personal knowledge of physicians who never refuse this kind of

business; and whenever we procure any positive evidence we mean to use it against them. It is not our duty to act as a detective police, but there is room in this country for action in its medical societies with reference to some of their members; and we do not doubt that when the matter is brought up in proper shape, they will inflict the proper punishment without fear of consequences.—*American Med. Gazette.*

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*Regimen.*—Dr. James Jackson, in his letters to a young physician, advocates an exclusive vegetable diet, both as a remedy and a preventive measure in epilepsy and apoplexy. Although patients may rebel against the prescription, if made to embrace the remainder of their lives, they will generally become reconciled to it if recommended temporarily, so as to become more indifferent on the subject than they had anticipated. Exercise is enjoined, mental perturbation disapproved, and the patient advertised not to return to animal food so long as he has very good health without it. In phthisis and hemoptisis on the contrary, he recommends animal food, milk, and a farineous diet, to which should be added fruit, and other articles of a laxative character, in case of a tendency to habitual constipation. Exercise in the open air, he considers of all things the most important in these diseases, which should be carried as far as the vigor of the patient will permit. It should not be done rashly, but boldly. The great object is, to prevent the cachexy, if it has not appeared, or to overcome it when it has, by such measures as will tend to increase the general vigor of the system, trusting to the natural efforts to overcome the disease. With the body properly protected by suitable clothing the patient is advised to live pretty much out of doors. For the relief of hemoptysis he recommends a combination of sulphate of copper and opium. In an urgent case he gave one grain each of these remedies, and repeated the dose in twelve hours. During fifty years practice he had only met with two cases in which this hemorrhage proved fatal in phthisis.—*Med. Chronicle.*

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*Cure of Itch in Half an Hour.*—Dr. E. Smith, at a meeting of the London Medical Society, called attention to an article in the *Gazette Hebdomadaire*, by Dr. Bourguignon, in which is a confirmation of the value of the treatment of Itch, in Belgium, by sulphur, combined with lime, in a liquid form. The remedy is prepared by boiling one part of quick lime with two parts



of sublimed sulphur, in ten parts of water, until the two former are perfectly united. During the boiling it must be constantly stirred with a piece of wood, and, when the sulphur and lime have combined, the fluid is to be decanted and kept in a well stoppered bottle. A pint of the liquid is sufficient for the cure of several cases. It is sufficient to wash the body well with warm water, and then to rub the liquid into the skin for half an hour. As the fluid evaporates, a layer of sulphur is left upon the skin. During the half hour the acarus is killed, and the patient is cured. It is only needful then to wash the body well, and to use clean clothes. In Belgium, the treatment is introduced by first rubbing the body for half an hour with black soap; but this does not appear to be necessary. The only essential act is that of the careful application of the fluid sulphur. The lime is of no importance in the treatment, except to render the sulphur soluble, and such would probably be the case if potass or soda were employed. The chief point in the plan thus employed, which is an improvement upon the mode of application of sulphur in substance with lard, is the more ready absorption of the remedy, and consequently the more certain and quick destruction of the insect, by using sulphur in a fluid form. In so disgusting a disease it must be of great moment to be able to cure it in half an hour.—*Assoc. Med. Journal.*

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*Glycerine as a substitute for Cod-liver Oil in Phthisis.* By H. WARDNER, M.D., of Chicago, Ill.

In its internal use, glycerine has great advantage over cod-liver oil, on account of its blandness, and favoring instead of destroying the digestion, and nauseating the patient. In children, it is easy of administration, on account of its sweet and agreeable taste. In the latter part of October, 1855, by permission of Dr. N. S. Davis, I used it at the Mercy Hospital in the proportion of four parts to one of the syr. of the iodide of iron, in the case of a man about 40 years of age, who had been using the cod-liver oil, but was obliged to discontinue it, on account of its nauseating and irritating effects on the stomach. This man, at the time, was much emaciated, much troubled with coughing, and expectorating daily nearly a pint of thick, tenacious mucus, freely mixed with tubercular matter in a granular form. The infra-clavicular space was considerably fallen in, and all the symptoms and signs plainly evinced quite an advanced stage of the disease. He had been under treatment for several weeks, just previous, for chronic diarrhoea,

which was not entirely cured. In about a week after commencing the use of this prescription, the cough and expectoration ceased, and the patient was much improved generally. He has continued its use up to the present time, Jan. 10, 1856, has regained his natural fullness and rotundity, and is fast regaining his strength.

Dr. Davis subsequently used the same remedy in a case of incipient tuberculosis, with equally satisfactory results. Dr. De Laskie Miller recently prescribed in a more advanced stage of the disease, with the most happy effects. In conclusion, I believe it a most valuable addition to the list of curative agents. —*N. W. Med. and Surg. Journ.*

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*On Cantharidian, and its Relation to Spanish Flies.* By Dr. SCHROFF. (Reitsch. der k. k. Gesellsch. du Aerzte zu Wien. July and August 1855.)

Comparative experiments were made upon rabbits with the cantharidian and Spanish flies, and one comparative experiment by M. C. Heinrich, who took at one time 10 drops of a strong tincture of cantharides, prepared by himself from fresh undried flies; and at another time, 0.01 gramme of cantharidin. It is clear from these observations that the cantharidin is the irritating principle of the flies, as it not only produced gastro-enteritis, but, after absorption, also proved irritant to the urinary organs. One interesting result obtained by Heinrich is, that the cantharidin, although producing inflammation along the whole digestive tube, and in the urinary organs, failed to produce any excitement whatever of the sexual system, while the latter was a marked effect of the tincture of cantharides. The facts in our possession point to the volatile principle in the living flies, which give them their disagreeable odor, as that which most rapidly occasions sexual excitement.

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#### *Influence of the Sun's Rays in Consumption.*

In discussing the causes of tuberculosis and tubercular pneumonia, Dr. Coventry has the following judicious remarks:

"There is one subject which requires a more extended notice than it has usually received from our systematic writers. I refer to the influence of

the sun's rays. Every physiologist knows how absolutely necessary they are to the growth of plants, and the etiolating effect their absence or withdrawal has upon the complexion. Is it unreasonable to suppose they may have some influence in causing or preventing tuberculosis? It seems well established, that tubercles may be produced in animals by confining them in close and dark apartments, on a meagre diet. Dr. Hall says, that by this means, he produced fatty degeneracy in animals, which he considers analogous to, if not identical with tuberculosis. In the city where I reside, there was an office connected with a large mercantile establishment, so situated that the sun never shone upon it. It was in the rear of the building, with a single window, and that so surrounded with buildings as to exclude the sun. The occupants of that office died one after another, until the proprietors became alarmed, and had the office removed to another part of the building. One of the occupants I attended, when in the last stage of his disease. He entered the office a strong healthy man with no hereditary tendency to the disease, and temperate and regular in all his habits, but in less than two years he was carried, like his predecessors, to the grave, a victim of consumption. In his case I was never able to discover any cause, unless it was his occupying that fatal office, where he was book-keeper."

The question of the *contagiousness* of consumption is discussed as follows:

"*Contagiousness of Consumption.*—The question of the contagiousness of consumption, or the possibility of its being communicated from one person to another, still divides the profession. It is well known that in the South of Europe, it was formerly considered so contagious that the bed and bedding of persons dying from the disease were burned. Morgagni, in his great work, gives this as a reason why so few cures of the disease are reported, in his post-mortem examinations. Most writers in England and this country, consider the disease as non-contagious. That it is not contagious in the same sense as smallpox, measles, &c., is no doubt true, but that a person occupying the same close apartment, or sleeping in the same bed, breathing an atmosphere filled with the exhalation from ulcerated lungs, may not have his system so poisoned as to produce the disease, may well admit of a doubt. The fact that whole families often die of the disease, is familiar to us all, but this is attributed to their having the same hereditary tendency; but how does it happen that members of the family who are absent and have no intercourse with the sick, usually escape; and in the case of husband and wife, where there is no constitutional tendency, the result is often the same. I have seen an account of a man, who said that he had not a near relative in the world, and that he had himself been the unwilling cause of their death; that he had consumption, communicated it to his wife, and she to others, until the whole family were victims, whilst he himself recovered. The late distinguished Professor Willoughby mentioned to me, that a brother of his caught the disease from attending the sick bed of a beloved daughter. He stated that in his family there was no predisposition, and that his brother was a strong, healthy man, but the daughter had inherited the predisposition from her mother. During the illness of the daughter, her father had the principal care of her, was much over her, and soon fell a victim himself to the disease. It is well known that the glanders in the horse is highly contagious, and that it bears a strong analogy to consump-

tion in man. I would not have it inferred, that I believe there is danger of the disease being communicated where proper precaution is used, but I have seen too many melancholy cases where I believed the disease was communicated to permit me to doubt its possibility."—*Med. & Surgical Reporter*.

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We have before us a copy of Draper's Physiology, published by Harper & Bros. Our time and space in this No. of the Journal, will not admit of such an extended notice as this important work demands. We will allow ourselves the pleasure of giving this excellent production such attention as it deserves.

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#### SUBSCRIPTIONS RECEIVED.

E. A. Eve, Ga., vol. 1 ; Wm. H. Boyd, Ga., vols. 1 and 2 ; J. J. Montgomery, Ga., vol. 2 ; B. F. Holsembake, Ga., vol. 2 ; Jesse Yon, Fla., vol. 2 ; Vanlier Jackson, Tenn., vol. 2 ; C. C. Lloyd, Ala., vol. 2 ; B. M. Thompson, Ga., vol. 2 ; B. O. Jones, Ga., vol. 1 ; J. D. Keaton, Ga., vol. 2 ; A. C. Jones, Ga., vol. 2 ; J. H. Ragan, Ga., vol. 2 ; J. S. Riley, S. C., vol. 2 ; R. C. Mayson, S. C., vol. 2 ; R. B. Jackson, Ala., vol. 2 ; Moses Worthington, Ala., vol. 2.

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## ORIGINAL COMMUNICATIONS.

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### ARTICLE I.

*A Thesis on Acute Inflammation, submitted to the Faculty of the Atlanta Medical College, Session 1856. By C. C. LLOYD, of Wetumpka, Alabama.*

*Acute Inflammation.*—The term inflammation is derived from *inflammo*, to burn; so called in consequence of the burning pain felt in the affected part.

The peculiar morbid condition is one of the utmost importance to every surgeon and physician; because there are but few diseases of a serious character which run their course without the occurrence of inflammation at some period of their progress. Hence, the necessity for a most careful investigation, and thorough acquaintance with its phenomena, its diversified products, and the relation of its various processes to each other.

Acute inflammation is that variety which is violent in its attack, and rapid in its course, and may be defined a pathological condition characterized by unusual redness, heat, pain, tumefaction, and change or arrest of the function of the organ or part affected. We may have, however, an occurrence of one, or more, of these symptoms, without the presence of inflammation; nor is the absence of one or more of them incompatible with its existence.

We shall not enter into a detailed consideration of the numerous and diversified causes producing inflammation, but notice them briefly, and proceed to examine its various phenomena, its products, &c. The causes may be divided into predisposing and exciting: of the former, we see examples in those whose vascular systems are irregular, as the result of original conformation, or induced by previous disease—those who have been subjected to fatigue, confinement, impure air, &c. Of the latter, we have mechanical, chemical, and vital irritants; also, those producing congestion—as cold, malaria, suppression of natural or habitual discharges, &c.

The phenomena observed in the process of inflammation are curious and interesting. Place, for example, an irritant, as a drop of nitric acid on a living tissue, and notice the result—the first change visible is a contraction of the vessels, momentary and spasmodic, as it were, retarding the flow of blood through the part. This contraction is speedily followed by great dilatation and increased flow of blood.

The seat of the primary part of the process of inflammation is generally thought to be in the nerves of the part; but Pathologists have not, as yet, proven this satisfactorily; and while this may be true of irritating causes, we are under the impression that the nerves are not essentially its seat; because many of the agencies, producing internal inflammation, seem to produce their effects without any marked implication of the nerves. We are of the opinion, that so far as is at present known, the blood vessels and their contents are the essential seat of the whole process of inflammation; and though irritating causes, as above stated, act on the nerves also, yet others, as cold, operate chiefly on the blood vessels and contents only. Hence, we find that causes predisposing to inflammation, are circumstances interfering with the action of the vascular system.

We next come to notice the changes produced on the vessels and contents, and the attending phenomena. The vessels are enlarged, as is obvious from the redness which may be seen with the naked eye. Enlargement is also seen in congestion; but there are other symptoms which are not seen in congestion. We have greater heat and pain, abundant effusions, a florid redness, instead of lividity, as in congestion, violent pulsation

of the arteries, increased motion of the blood, and lastly, the various products which are quite sufficient to satisfy us that we have inflammation.

The causes of, or conditions necessary to, the production of this enlargement of the blood vessels, requires further research. The most plausible theory, however, and the one most generally adopted, is, that the tonicity or irritability of the structure of their walls is impaired, perhaps by the previous excessive stimulation.

Another interesting phenomenon of inflammation is the fact that the flow of the blood is partly increased, and, at the same time, partly diminished. The former condition is seen in the rapid passage of the blood through the arteries; the latter in its stagnation in other obstructed vessels in the part.

Many hypothesis have been framed for the purpose of solving the difficulty which exists in regard to understanding the cause of this obstruction. As far as has been ascertained, it would seem to be due to the increased production of the colorless corpuscles of the blood, and their adhesion to the walls of the vessels, and to each other; to the increased mass of blood in the minute vessels, and to the diminished "*contractilité de tissue*" of their coats.

The blood, also, undergoes important changes. We find the fibrine and white corpuscles greatly increased in this affection. We think the latter, especially, are more in excess, probably, than the fibrine. Now, in estimating the quantity of the latter, the white corpuscles are not taken into the account. They have never yet been separated from the fibrine of the human blood; their composition is unknown; but in the estimate of fibrine, we have their weight included. Now, it is evident, that the white corpuscles are increased, and we think it very probable that a portion of the supposed increase of fibrine may be due to their being weighed with it.

Having noticed the effects of the inflammatory process on the blood vessels and their contents, we will now consider, separately, the symptoms to which we before alluded. The symptoms are divided into local and constitutional. The local occur in the part which is inflamed; the constitutional affect the whole system. The local are, redness, heat, pain, tumefaction, and change in the function of the organ or part.

The redness of an inflamed part, we think to be due chiefly to the increase in the quantity of blood in its vessels, the vessels as before stated are distended, the finest capillaries, which in a normal condition, are invisible, are now distinctly seen, dilated and filled with red blood. *The proportional* increase in red corpuscles, by the exudation of serum, may assist in some degree. Some observers have conceived that new blood vessels are formed by the blood as it forces its way through the tissues. This notion we think erroneous.

*Heat.* The heat of inflammation depends greatly, perhaps solely, on the increased flow of blood through the part. This is evident from the fact that in proportion to the violence of the inflammation is the heat increased. We do not think inflammation, as supposed by some, a calorific process by any means, for many experiments have been instituted to determine this point, and in no instance was the temperature found above that of the interior of the body.

*Tumefaction.* The enlargement of the blood vessels in an inflamed part may assist in producing this phenomenon, but the main agency is the effusion from the distended vessels. The form and degree of the swelling will depend much on the natural structure of the part involved. In the mammary gland, the scrotum or any of those loose cellular structures, the swelling is often extreme, while in parts composed of dense fibrous tissue, but little exists.

*Pain.* The chief cause of pain, is the pressure on the minute nervous branches by the turgid blood vessels: in some degree also, perhaps, by the exalted sensibility of the nerves, which is produced by determination of blood.

This symptom, though usually present in acute inflammation, is not invariably so, neither are we to regard its presence, pathognomonic of this affection. The character and intensity of pain, vary according to the seat of lesion. In inflammation of bone, for instance, or any dense tissue, we have excessive pain, while in parenchymatous, organs and mucous membranes, it is comparatively trifling.

Inflammatory pain is not always confined to the affected part, but seems to radiate along the course of the nerves, manifesting itself in other parts.

Change or arrest of the function of the organ or part, is



always present in inflammation. We notice this in gastritis, where the stomach is unable to perform its function of digestion, and in diarrhœa, the morbid secretions poured from the intestines.

*Constitutional symptoms.* Inflammation is attended with certain symptoms called constitutional, the severity of which will be proportional to the intensity of the inflammation, the amount of local irritation, and the vital importance of the organ involved. The constitutional disturbance in inflammation assumes the form of fever. This is called inflammatory, symptomatic or surgical fever. It presents a great variety of forms, the principal of which are called *sthenic* or typical, *asthenic* or typhoid, and *irritative* or nervous.

Inflammation has two true terminations, resolution and metastasis. When it terminates by resolution, we find the effusions removed by absorption, the obstruction which existed in the blood vessels yields, and the part is restored to its normal condition.

By metastasis is meant a change in the seat of the affection, its sudden disappearance in one part and appearance in another. This rarely occurs.

Besides these true terminations of inflammation, we have it passing from its primary condition to other forms of the disease. Thus, where we have effusion of lymph, it is called adhesive; the production of pus, called suppurative; formation of an ulcer, ulcerative; death of the part, gangrenous.

At an early period in the process of inflammation, the turgid blood vessels, in the attempt to relieve themselves, throw out an abundance of serum, resembling that resulting from congestion, except that it contains a little more animal matter. This is followed by the effusion of fibrine, called also lymph, plasma and coagulable lymph, giving to the swelling a degree of hardness as may be seen in boils, thickened mucous, membranes, &c. Of this effused lymph, there are two varieties; called plastic and aplastic, or corpuscular. The plastic is the true coagulable lymph, and plays an important part in the reparation of injuries and rebuilding destroyed tissue. It is met with in the healthy and vigorous. The aplastic or corpuscular, possesses no power of coagulating, but consists chiefly of what are called exudation corpuscles, freely floating in a

serous fluid, and is found in cachetic and scrofulous constitutions.

The changes which this effused matter may undergo, are numerous, and we will notice them. We find it either absorbed as noticed in resolution, organized or passing into a state of degeneration. In a healthy constitution it is apt to become vascular, and provided the inflammation do not continue too long, and congestion be kept down, will be converted into a fibro-cellular structure. This is called adhesive inflammation. Diversified notions exist among authors, as to the manner in which this vascularization takes place. Are the vessels formed within the lymph? or are they projected into the mass from the adjoining tissue? The latter looks to us the more reasonable, but the subject will admit of further investigation.

As before stated, the effusion may degenerate. When we have a predominance of the aplastic material, found in weak, cachetic or phthisical habits, this is especially apt to occur. This degeneration may take place in various ways. It may become hard and withered; it may undergo what is termed fatty degeneration, and be changed into granular matter, or be converted into pus. This latter is particularly liable to take place when the inflammatory process continues for a considerable length of time, the part is subjected to the influence of the air, or the general health of the patient neglected.

We now approach the suppurative form of inflammation, which is attended with many phenomena of interest. It is characterized by the production of pus. This, when it results from active inflammation, in a healthy subject, is an opaque, creamy, thick fluid, of a yellowish green color, has a slight faint odor, and an alkaline reaction. This is called laudable or healthy pus, and consists essentially of pus-cells, resembling, in some degree, the white corpuscles of the blood. There are several other varieties, the sanious or bloody, the curdy or cheese-like, and the muco-pus or sero-pus.

Pus is, we think, a true product of inflammation, and not the disintegration of the solid tissues, as was thought by the older surgeons.

That form of inflammation which results in the formation of an ulcer, is called ulcerative. The changes produced in the tissues by this process, are not yet clearly understood, but

there is no doubt that they consist essentially of the molecular death of the tissues, and the detachment of the dead matter, by a peculiar action of the adjacent living structures.

Lastly, gangrene or sloughing may occur from the intensity of the inflammation. And this may take place, even if the part be sound and the patient's general health unimpaired. Most usually, however, it is where there is debility, local or general, by which the vital power is reduced.

**TREATMENT.** The treatment may be divided into local and general or constitutional.

In the local treatment, if the inflammation be external, as, for instance, that resulting from a wound, the first indication is to remove all sources of irritation, and as rather a preventative agent, we apply cold evaporating lotions. If the tendency to inflammation be great, the application of cold by irrigation, is very beneficial.

These are the means usually had recourse to in the earliest stages.

When inflammation has actually commenced, the abstraction of the blood locally, by cups or leeches, is found of great benefit. Of course, as the disease progresses, the treatment may be modified, and the surgeon must be guided by the condition of the patient, and the state of the inflamed part.

**CONSTITUTIONAL TREATMENT.** If the inflammation be but slight, a mild aperient will perhaps fill every indication. But should the sthenic variety present itself, and the patient be strong and plethoric, we must have early recourse to bold and energetic measures. Bloodletting is the most potent and most beneficial remedy we can use. And in the abstraction of blood, we should exercise some precaution as to the position of the patient. He should be placed in a sitting, or better still a standing posture, and be bled from a large orifice, in order to produce the greatest impression upon the system, with the least loss of blood. Cathartics are of very great service. One of the best of these, if not the best, is mercury, or some one of its preparations. Opium is an excellent remedy in this form of symptomatic fever. It exercises a soothing effect upon the nervous system, and also modifies, to some degree, the heart's action. An excellent mode of administering it, is in combination with some one of the mercurials, as calomel.

In the treatment of the asthenic or typhoid variety, we direct our remedies especially to the support of the patient's strength. A gentle laxative may be given to move the bowels, then tonics and stimulants, constitute our most reliable remedies; brandy, wine, ammonia, &c.

In the irritative, the tendency is to great nervous disturbance, sometimes wild raving delirium, followed by extreme exhaustion, and unless relief is had, speedy insensibility and death. Here, we must use anodynes to relieve the violent nervous symptoms, and stimulants to support life's failing powers.

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## ARTICLE II.

*What is Hereditary Transmission?* By. J. J. M. Goss, M. D.,  
Jackson County, Georgia.

I have often perused voluminous works upon the cause and pathology of the hereditary diseases, to ascertain, if possible, what was meant by the general term of hereditary transmission, but I have generally found but little else than conjecture, or mere assertion, that such and such diseases were transmitted from parent to child. Dr. James Clark, speaking of this subject in his treatise upon Phthisis, says, "that tuberculous-phthisis originates in a morbid state of the constitution." (See Cyc. Prac. Med.) Now, if we admit the disease to originate in a morbid state of constitution, then we must admit that that state exists in direct relation to the form of disease which subsequently becomes developed, and consequently, that that morbid state must be the incipient stage of the disease—the disease itself. Such reasoning explains nothing; it is simply equivalent to the simple declaration, that phthisis exists. If we admit phthisis to originate in a morbid state of the constitution, then these pertinent questions arise: What occasioned this state? And why did it not result in some other hereditary disease, as rheumatism or gout? Neither of these questions admits of more than an exceedingly hypothetical answer; but, under a proper view of the subject, which we

will hereafter explain, it follows that the organic forms of the individual determine the form of the disease, under certain geographical and topographical conditions, and any cause of excitement that can produce a derangement of the secretions, may occasion the disease, or it may even spontaneously ensue. We then propose to show that hereditary transmission is not the transmission of a morbid state of constitution, but a defect of organization. If we take a correct view of the relations and functions of the cerebellum and medulla-oblongata, we can very rationally explain what this defect of organization consists in. Combe and other phrenologists state, that the cerebellum presides over the sexual appetites; physiologists state, that it also presides over other functions, viz: muscular motion and desire of urination, defecation, and also, animal sensibility. If the medulla-oblongata be the seat of any one desire, it is certainly that of respiration, because it is found to be large in those persons who manifest the greatest anxiety about this function—namely, consumptives. And, as a general fact, it will be found that those who have the most feeble endowment of the organs of muscular motion and animal sensibility, and the most feeble muscles, have the medulla-oblongata as large as the most muscular men. This relation of the medulla-oblongata and the organs of muscular motion and animal sensibility, clearly shows that the cerebellum has no direct agency in the function of respiration, yet, without its incidental influence, a high endowment of the muscular system, the respiratory function cannot exist. You will not find a well developed thorax associated with a small endowment of the organs of muscular motion. Whenever you find a large endowment of the organs of muscular motion and animal sensibility, especially the former, you may predict the existence of a rheumatic predisposition. We may find syphilitic or mercurial varieties of the disease under contrary circumstances, but never the idiopathic; and from this conclusion, we class gout in the same family. Dr. Wood says, that “there must be a peculiar state of the system predisposing to this form of disease.” “There must be a rheumatic diathesis,” says he. In what does this diathesis consist? Is it in the blood? then, it is the disease, and not a mere predisposition to it. We would say that it consists in a high endowment of

the animal muscles, with considerable sensibility of the skin. Dr. Wood says, "that children under ten years, and adults above sixty, are seldom attacked; and men are more subject than women to this disease." Why are children and women less subject to the disease than men? because they have all parts of the cerebellum less developed than men; and old men are less liable because these functions are on the decline in them. You find active congestion of the brain terminating either in apoplexy, palsy, or epilepsy, when of an idiopathic character, also associated with a high endowment of these organs. You will see, likewise, erysipelatous inflammations, of an original character, attended by a similar endowment. With the same condition of the cerebellum, is a corresponding liability to cutaneous diseases; while those of a contrary organization contract such diseases with difficulty. In proportion to the development of these two organs, will be a liability to, and the progress of, cancerous diseases. You will not find passive congestions of the brain, convulsions, chronic hydrocephalus, chorea sancti viti, tubercular diseases of the lungs, &c., to be unassociated with a feeble endowment of the above named organs. There is one exception to this statement, which is this, when the hemispheres, or that portion of the cerebrum which includes the peculiarly human faculties, preponderates over the balance of it, the vital forces may be very feeble, and yet indicate no tuberculous disposition, because, under such conditions, the venous system preponderates over the arterial—a condition which is incompatible with tuberculosis. It appears, then, that the cerebellum is indirectly connected with the above morbid affections, and we may add, perhaps, many more. Animal sensibility presides over the cutaneous surface; hence, derangement in it may be followed by abnormal actions in the functions of the urinary apparatus, and to these frequently succeed, as sequents, rheumatism, gout, epilepsy, palsy, and other diseases. When the organ of muscular motion is but feebly developed, then we will find passive congestions of the brain, convulsions, hydrocephalus, and consumption, when largely developed, with deficient exercise, we have pulmonary congestions and hemorrhage, or cerebral apoplexy, or gout. And when over-exercised, the kidneys failing to eliminate, the urea that is elabo-

rated in the metamorphosis of muscular tissue, we have rheumatism, epilepsy, or some other disease as the result. With a high endowment of amativeness, and a deficiency of the other two organs of the cerebellum, we find amaurosis to result, also paralysis and imbecility; but with a high endowment of the two, and a deficiency of the posterior lobes of the cerebrum, to furnish motives for such exertions as would expand cerebellar irritation, we have cerebellar apoplexy and mania. There is still another physical condition connected with a relation that is frequently found to exist between the cerebellum and medulla-oblongata. When the medulla-oblongata preponderates over the cerebellum, there will exist a liability to tuberculosis; but when this condition is reversed, there will be an idiopathic disposition to fat, or obesity and dropsy. In these conditions, the thorax is large enough, but the lungs have but little expansive power—such persons never manifest any respiratory action in the facial muscles. According to the above premises, if they be correct, it plainly appears that all the diseases named originate in parts which are exclusively appropriated to the functions of vitality; and by a careful consideration of the temperaments, it can easily be understood how they may so modify the influence of predisposing and exciting causes, as to produce many, and apparently very different, diseases. As for diseases of the vegetative system, we will find them originating in the ganglionic system, and connected, by a sympathetic arrangement, with the anterior extremities of the middle lobes of the cerebrum. And now for the evidence in support of these conclusions. It will be noticed, that those in whom we find a high development of both the medulla-oblongata and cerebellum, will have a large chest, and thoroughly developed animal muscles; their respiration and circulation are promoted by muscular action; their cervical, thoracic, and abdominal muscles aid the diaphragm in accomplishing, fully, the respiratory function: accordingly, in them we find a high development of both the medulla-oblongata and cerebellum. We infer, then, that where the animal muscles are feeble, that respiration is mainly sustained by the diaphragm, consequently, the superior portions of the lungs are but rarely inflated, so becoming feeble from inertia, they soon become the seats of tubercles, for it is admitted that

tubercles first invade the superior portions of the lungs. We will admit that this peculiar organic defect is hereditary, but not the disease itself, and would refer the transmission of this defective development of the cerebellum to certain violations of the procreative laws, by which we mean the marriage of individuals who are nearly, or quite the same in temperament. By the last named fact, may be explained the great deterioration, or degeneracy of race, by the intermarriage of relations. Imperfection of organization, resulting in disease and premature death, is often, but very improperly, attributed to an all-wise creator, who never blundered in his work of creation. Disobedience to the laws of organic nature commenced with the dawn of existence, and a greatly enlarged edition of it, with that of civilization, and a want of equilibrium in organization resulted, rendering man incapable of repelling many of the various causes of disease. This defective organization has so multiplied, if not increased, that it may be safely asserted, that hardly half the children, now born, possess an organization adequate to the attainment of three score years. In human society, it has been estimated, that one-fourth the deaths are of children under one year of age; one-half consist of children under five years of age; three-fourths consist of persons under forty-five years of age; six-eighths under sixty; seven-eighths under eighty; and but very few live to be one hundred years of age. Now this difference of longevity, mainly, depends upon a defect in constitution, viz: in that vital force which the original germ received from the parent; as the result of the laws of nature, parents may expect to have secured to them their own vital stamina, their virtues and talents, and, also, an inherent proclivity to their infirmities, vices and crimes. They need never expect to find their offspring sound in constitution, when they themselves are deficient in constitution. They need never look for amiable dispositions in their children, when they themselves do not possess them; children cannot inherit that which the parents do not possess; but they will inherit that which parents do possess, be it good or bad. No man of common sense expects to find pippin apples on crab trees—each tree will produce its kind, and human parents can do no more.



## ARTICLE III.

*Causes of Disease.* By Dr. W. T. GRANT, Wrightsboro', Columbia County, Georgia.

Where do diseases come from? is a question to which, as yet, no definite answer can be given. Its investigation is rendered exceedingly difficult by the numberless elements involved. We have to take into consideration so many circumstances, that the very comprehensiveness of the question renders it repulsive to a great many who would otherwise engage in its study. But cannot this difficulty be remedied? Cannot the circumstances to be considered, the many elements involved, be so narrowed down that we may be able to grasp the whole in one view? I think so; and it is the object of this communication to attempt the accomplishment of this object. To do this, we must elevate ourselves above the consideration of individual causes, and take a view of the whole field of diseases and their causes.

My first proposition that I would lay down in connection with this investigation is, that *no disease originates within the system*; every disease or morbid condition, whatever its nature, finds its cause outside of the organism. And as a sequela to this proposition, I will say that it is impossible for any one to become diseased whose every organ is exercising its function in perfect health, and who is not exposed to any extraneous morbid agencies. Take any one whose system is entirely free from disease, in whom the tripod of life—the nervous system, the circulating system and the respiratory—is acting normally, and I will warrant such a person good and perfect health as long as he will keep himself free from every external morbid agent. This is a bold position to assume, but I think it the only reasonable one. If the nervous system—I mean the whole nervous system—is in perfect health, producing just the normal quantity, as well as quality, of the nervous fluid; if this fluid be properly distributed to the various parts of the system; just the right quantity to each organ and part, and if each organ or part is perfectly sound, why should not each and every part perform its function normally? And why should there not be perfect health? And, also, how can any of the parts

become deranged? Let us illustrate the proposition with some organ. Take the liver for example. If the liver is acting healthily, how may it become deranged? In several ways: by receiving too much or not enough nervous fluid; by receiving too much or too little blood—or the blood may be unhealthy. Now, suppose it should receive too little nervous fluid, it will be deranged in its function of course; and we must go to the nervous centres to ascertain why enough nervous fluid has not been sent to the liver. So there we consult the nervous centres, and we will find that they cannot, perhaps, produce the *quantum sufficit* of nervous fluid. Then, the question arises, why cannot they do it? The answer is, that something is in the way. Do they stop of themselves performing their function, or does something else stop them? If they possessed volition, independent volition, they might very readily cease the performance of their function. But they have no volition, and cannot therefore work at leisure. So, then, if they have ceased to produce the proper quantity of nervous fluid, it is because they have been acted upon by some injurious agent. This agent will be found in the blood; but it is foreign to the blood; that is, it does not naturally belong in the blood, else the nervous centres would never perform their function normally. Where, then, does the blood get this deleterious agent? It may have entered the system through some one of the avenues that lead into the body, the lungs, the skin, or the stomach; or it may have been produced in the system and could not get out. If the first position be taken, then our original position is demonstrated. But if the last be taken, then I ask if the deleterious agent has been produced in the system and could not get out, *why* couldn't it get out? Nature has provided an exit for every element or compound which is produced in the system, and which may prove injurious by being retained. Then the above question is answered. If the injurious agent could not get out, it is the fault of some one of the excreting organs. What deranged that organ, then, is asked? Something deranged it of course. The agent that produced the disturbance in its function is found in the blood also, and if traced around through its windings through the system, will be found to have entered from the outside. Now, then, to recapitulate in a reverse direction to that which we have just

been pursuing, suppose some deleterious agent enters the system, and, acting upon the kidneys, diminishes the excretion of urea; the urea remaining in the system will affect the nerve centres so that they cannot produce their accustomed quantity of the nervous fluid, in consequence of which the liver, as well as other organs, will not receive their due supply, and must necessarily become deranged in their function.

I conceive that I need not illustrate this point further, for, with but slight change, the above illustrations will apply to every case of disease. The reader can trace the bearings. Whether the original proposition that all diseases are produced by causes external to the system or not, is established, is immaterial in this place. I will however assume that it is proved.

Now, then, if all diseases are produced by causes external to the system, through what channels do they act upon it so as to produce disease? And what is the nature of these causes or agents? There are three modes of ingress: through the stomach, through the lungs, and through the skin. Agents acting through the stomach are mostly palpable, and I shall not consider them, as it is not my object to investigate the known causes of diseases, but the unknown. We have left, then, the remaining two—the lungs and the skin. That the skin affords easy ingress to deleterious agents, there can be no doubt. A sailor once told the writer that he was aboard a ship in the West Indies, at one time during an extremely fatal epidemic of yellow fever, and that his ship was in its very midst. An “old tar” told the seamen of his vessel to wear flannel shirts and there would be no danger, which was done by all the sailors with one exception. All escaped except the one who wore no flannel. I cannot say that there was, in this case, any virtue in the flannel, but the coincidence was singular, to say the least; and if any reliance may be placed in the statement, the flannel was prophylactic only in excluding the yellow fever *materies morbi* from the skin. Other cases on record, as well, also, as a great many observations made by different persons at different times, all go to prove that the pores of the skin afford an easy ingress to morbid agents from without. That the lungs are an avenue by which diseases find an entrance into the system, no one will now deny.

Having now indicated the channels by which the *materies*

*morbi* enter the system, I may now consider those agents themselves. Chemistry informs us that all matter exists in one of three forms : solid, liquid or gaseous. We know then that the poison of diseases exists in one of these three forms. Now, then, inasmuch as nine-tenths of the diseases enter through either the lungs or skin, and since a solid or a liquid could not pass through those organs, (excepting under extraordinary circumstances,) we are led to look among the gases for a solution of the question. Where do diseases come from ? I think that we may accuse them of being the generators of nine-tenths of "the ills to which flesh is heir." This narrows the question down to the gases. Can it not be carried still further ? I think so, most unquestionably ; but it is in the hands of the chemist. Is not yellow fever superinduced by hydrogen or some of its compounds, or hydrogen in an allotropic condition ? A very significant item on this point is the following : During the yellow fever epidemic in New Orleans in 1853, Dr. McFarlane of that city, attached a piece of perfectly fresh meat to a kite and let it up into the air, and in a very short time the meat was putrid. The agent that produces our fevers is undoubtedly gaseous in its nature. The pestiferous vapors that float over the Pontine marshes are nothing more than a solution of the deleterious agent in water. The reader has undoubtedly observed over and over again the dense fogs of an early morning : they are pregnant with danger, especially in the Autumn season ; they are loaded down with health-destroying gases. It is for the very same reason that exposure to the night air is so ruinous to health. The reason is clear : at midday, when the sun shines bright and warm upon the various bodies of water around, an evaporation takes place from their surface ; and whenever this evaporation occurs from a marsh, the vapor rises highly charged with the soluble gases which are produced by the decay of organic matter. The vapor remains suspended in the atmosphere, and when the sun has set, and his heat is withdrawn, the earth and other bodies begin to cool ; and the vapor in the atmosphere being thus exposed to a cooling process, is condensed in the form of dew, and gives up its cargo of dangerous gases, and they float in the atmosphere until disposed of in some way by the laws of nature. There are ten thousand causes at work around us

every minute, the very existence of which we do not even suspect. Allotropism may be at work, arranging and rearranging the elements of nature around us, changing their properties and nature, devising new compounds that the chemists never dreamed of. It may be constantly altering the nature of the simple elements with which the chemist deals, and then sending them into our bodies to act catalytically upon the elements that go to make up our blood as well as other parts of our bodies. Here is the key to physiology, but it will be a long time before we may enter within the temple where we will find the philosopher's stone with which to conquer disease.

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#### ARTICLE IV.

*Abuse of Remedial Agents.* By J. G. WESTMORELAND, M. D.,  
of Atlanta, Georgia.

The abuse of the most valuable remedies, as well as the most nutritious articles of diet, has always a contrary effect from that observed in their proper and rational use. The gourmandizer finds anything but strength and activity of mind and body to result from the enormous quantity of food required to satiate his voracious appetite. Food and medicine prove a blessing, when properly used, but the most destroying curse when given out of place, or in excessive quantities.

The impression prevails, in the community generally, that medicine is as essential to the sick, as food to the hungry; and that to derive the required benefit from physic, it must *work*, must *operate*.

Now, to those not informed on Medical subjects, knowing nothing of the nature and *modus operandi* of remedies, all remedial means seem unpromising, unless they augment perceptibly some of the prominent physiological actions, producing catharsis, emesis, diaphoresis, or some such effect. Hence, those remedies making the most decided impressions in this way are the most popular ones. It is not a very easy matter for one unaccustomed to their use to perceive the impression made on the disease itself with medicine. A violent action:

may be exerted on the organs, and when it has subsided the invalid may feel such comparative ease, that a superficial observer, and the patient himself, may conclude the disease is controlled, when, in fact, no impression upon it has been made. Cathartics, as a class, of all others, are most abused in this way. It is an extensive class, comprising articles calculated to produce any degree of action, from the natural healthy discharge to the most drastic watery evacuation. Their effects are visible; and, in their action it may be truly said, the *physic* has operated. Charlatans, availing themselves of the advantages derivable from this popular feeling, flood the world with "Mild Aperient," "Anti-billious," "Chologogue," and "Cathartic pills;" and to secure the patronage of mineral fearers endorse upon the box, "purely vegetable." The better to effect this wholesale pilling, presses are hired to puff box after box down the throat of their unsuspecting neighbor.

The clergyman is presented with a box of pills, made of the most familiar ingredients. These, after producing the usual aperient effect of medicines of the class, are, from the mystery thrown around their composition, thought new and valuable, and proclaimed a useful remedy, by certificates and otherwise.

The statesman, as well as the preacher, is supposed to know all about everything; therefore, his testimony, on a subject about which he knows literally nothing, is obtained, greatly to the advantage, not of the sick, but of him, who, for pecuniary gain, deceives his neighbor, and sells him at an exorbitant price, that which, if known, he would not desire to accept as a present. And this is not all the evil that comes of cathartics. When I say evil I mean no disparagement to the claims of this valuable class of remedies; for invaluable are they to the therapist.

But, to carry out the sentiment with which this article was commenced, great injury may result from the improper use of good things.

Such is the case with this class of medicine, not only when under the control of merciless quacks, but when prescribed by those governed by high and honorable motives in their use. In despite of all our philosophy and sense of propriety, we, of the medical profession, sometimes do that for which we can give no satisfactory reason to ourselves nor to any one else.

Perhaps habit or precedent often controls our action, and leads to performances not tolerated by reason. Sometimes, too, when a proclivity is observed in those whom it is our *interest* to please, we are inclined to cater to the prejudices of such patients.

These influences imperceptibly creep upon us, and often before we are aware of it, a habit is formed, for which we can give no satisfactory account. A patient is seen—he says, “I’m costive,” “bound in my bowels,” “have pain in my belly,” &c. Take oil, pills, calomel, or something of the kind, to “purge the bowels,” is often the direction of the physician; without weighing the probabilities of benefit, or the cause of distress. The patient and doctor are satisfied when the organ in pain is acted upon; whether “for weal or for woe,” however, neither has any certainty. Or, when it seems desirable to make a less common prescription, a compound pill, powder or bolus is prepared, incorporating one or more cathartic articles, and given as a nameless prescription of “medicine.” The mucous surface is irritated, the peristaltic action increased, the medicine “*works*,” the patient is content, and the doctor too often satisfied.

All this would be no great evil, seeing no particular mischief is done, were it not that occasionally such articles are contra-indicated, and their application places the sufferer beyond the reach of remedies.

This more frequently occurs on account of the alledged universal application of cathartics in disease. In diarrhoea, whether, from relaxation or enteric irritation or inflammation, loud calls are made for “medicine” to remove more thoroughly the offensive fœcal accumulation, which is supposed by the patient, and sometimes the Doctor too, to be the cause of the affection. Pills are repeated again and again—still the fetor and discoloration are prominent characteristics of the discharges. And it is remarkable that it does not once enter their minds that the supply of offensive matters is kept up by the very means intended for their removal. A like mistake prevails with some persons affected with habitual costiveness. Some of the *Indian-antibillious-aperient-purely-vegetable* pills, which are sounded by newspapers as the *sine qua non* in constipation, have been taken; and the bowels were actually moved by them! Yea.

nearly as well as they would have been by a dose of magnesia, salts or rhubarb!! The additional charm of secrecy and humbuggery has so attracted the constipated epicure that he fancies his box of pills the only safeguard of his life!

Aside from such whims indulged by the people, the system of indiscriminate purging and "physicking" adopted by physicians themselves, is, no doubt, one of the main supporters of the faith that is professed in the anti-physic, sugar-pill or homœopathic doctrine. The sick, in many cases, do as well with nothing at all as with irritating and depressing remedies. Mild cases of disease, similar in every respect, are treated with improperly applied violent medicine, and with expectant remedies. The latter generally makes the most favorable impression; and, although a proper selection, and discriminating use of remedies might produce better results, the idea of operating medicine is discarded, and that which seems less offensive is substituted.

If active medicines were used properly, and only when required, their control over disease would be more obvious, and people and physicians would properly appreciate their value, and one of the main props to humbuggery and charlatantry be removed.

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## ARTICLE V.

*Puerperal Fever—Its Pathology.* By J. BORING, M. D., Professor of Obstetrics and Diseases of Women and Children, in the Atlanta Medical College.

Few subjects have excited greater interest in the profession, and, perhaps, none have been less understood than that of Puerperal, or Child-bed Fever. And although extended thorough investigations have been had by means of hospital practice and post mortem examinations, nothing has yet been discovered by which unanimity of opinion and practice has been established. There are conflict of doctrines and disagreement in practice.

The truth of this remark is apparent, from the number and variety of names with which the disease has been honored, the



conflicting causes assigned for its existence, and the directly opposite treatment adopted.

One calls it Puerperal Fever, another, Child-bed Fever, another, Puerperal Peritonitis, whilst others, rejecting these, divide it into Hysteritis, Ovaritis, Peritonitis, etc., as in their judgment, designating the *seat* and *nature* of the disease. Some account for its origin, by injuries sustained by the maternal organs, or placental retentions, decaying membranes, or coagulated blood, in the processes of gestation and parturition, and others hold that while these may, and often do, produce the disease, it is sometimes, especially during epidemics, caused by a *specific* virus or poison.

Such a state of the medical mind, on a subject of such moment, must be deeply deplored by all who feel the slightest interest in the science of medicine.

May we not ask, why such a diversity of opinion, why such contrariety of practice? Are these authors all right? It cannot be. Are they all wrong? We think not. There is much of truth and error intermingling in the discussion, and our manifest duty is, as far as possible, to discriminate, and avoiding the errors, avail ourselves of the light which has been shed on the subject.

That many valuable truths have been elicited, cannot be questioned, but this, like many kindred subjects, has to contend with the prejudices and prepossessions of the human mind. It is extremely difficult with men, especially those whose teachings have become *authority*, to yield an opinion, and more particularly, when to do so, implies a concession of their former errors.

Investigations, however faithfully and perseveringly conducted for the purpose of eliciting the truth, are often without the knowledge of the party, biased by opinions already formed, and as a consequence, go, in his judgement, to confirm the convictions already entertained. It is hoped, that this remark will not be construed into any, the least reflection, either upon the profession generally, or the writers referred to, particularly. We only intend, by the statement of a general truth in regard to the mind, to explain, in part, at least, how it is, that such widely different conclusions are arrived at from the very same premises.

But, notwithstanding these difficulties, much has been done in the way of discoveries, and very much of the mist and confusion by which the subject was invested, have been dissipated, and it is not unreasonable to believe that the time is not distant, when its true nature, or pathology, shall be fully understood.

Perhaps one of the greatest difficulties yet attending the investigation of Puerperal Fever, is that of its *name*. It will not be denied that many forms of disease, otherwise simple and easy of comprehension, have been obscured and rendered unintelligible by names, and of all these, none, we think, have suffered more than that of Child-bed Fever.

It may be seriously questioned whether it *deserves* a name. Is it a Fever? A distinct, Idiopathic Fever? Such as Yellow Fever, Intermittent, or is it a *Symptomatic* Fever? We know that Fever results from inflammation of the Lung in Pneumonia, but we do not say therefore, that the patient has Pneumonic Fever. The *fever* is not idiopathic, but symptomatic, and dependent on inflammation for its existence. But, if, as we think is the fact, the Fever of child-bed arises from, and is symptomatic of, inflammation of the Uterus or its appendages, it should no more be called Fever than the same or a similar febrile action resulting from, and symptomatic of inflammation of the lung. The mere difference of location can operate no such change.

A man is thrown from his horse and breaks a leg, or suffers amputation of an arm or thigh, and fever ensues, but who would think of giving it the name of *Fever*? A woman (an unimpregnated woman,) becomes the subject of acute Ovaritis, and takes on all the symptoms of fever, such as headache, backache, rigors, chill, greatly accelerated action of the heart and arteries, &c., but who would think of saying, she has the fever? *Ovarian Fever*? But why not say she has Ovarian Fever? Because the fever is symptomatic, and is the result of local inflammation. It is not idiopathic. So we think of Puerperal Fever. It is symptomatic—it is the result of local inflammation.

Here the question naturally comes up, “is Puerperal, or Child-bed Fever, an Idiopathic Fever?”

Those who take the affirmative, tell us, that there are two

forms of the disease, one dependent on inflammation, arising from injuries done the maternal organs, in the processes of gestation and parturition, or by the retention of placental portions, or membranes, etc., and the other, upon some *virus* which, as we suppose, is in the atmosphere of the patient. But, in all candor, is not this in itself an incongruity? Is it scientific? If both these forms of Puerperal Fever exist, (which is seriously doubted,) can both be set down as Child-bed Fever? Is not *one* at least, symptomatic?

If the views here controverted be correct, then, as it appears to us, at least, it would be right to say of the Pneumonic patient, "he has the '*Fever*,' '*Pneumonic Fever*.'"

But it will be said, the case is not fever, but inflammation of the lung, and the fever is but a symptom. So say we of *Puerperal Fever*. The patient has inflammation of the uterus or its appendages, and hence the fever.

We are told, however, in support of the doctrine here noticed, that whilst it is true, that there is a form of the fever dependent on local inflammation, and requiring a strongly antiphlogistic treatment, there is another arising from a deadly virus, in which the vital forces are greatly depressed, and in the treatment of which, we are compelled to rely on the most powerful stimulants and tonics at our command. It is held that this form of the disease, being the very converse of the other, furnishes demonstrative proof of its dependence on a wholly different cause.

To this we reply, that the very same thing occurs in many other forms of disease, and in the case of the same disease and patient during the progress of a single spell of sickness, and yet we never for one moment think of attributing the changes to the supervention of a new and different specific cause.

We find a patient to-day, the subject of strong reaction, and put him on the antiphlogistic treatment, but tomorrow he is depressed, prostrate, and requires a different treatment altogether, and we pass through the whole, nothing surprised, nor one time supposing that we had mistaken the form of disease, or that a new form had supervened. We *know* that on yesterday the disease was at a given stage, and to-day it has

reached another, in which the symptoms are modified accordingly. Take, for illustration, a case of Pneumonia.

We are called to the patient in the first *stage* of the disease, and find head ache, back ache, thirst, a bounding pulse, pain in the chest, laborious, hurried breathing, and, in a word, a high degree of excitement, constituting fever. Here we have Pneumonia, and the indication is, to reduce the excitement, which we attempt by the lancet, antimonials, etc. A day or two hence, on visiting our patient again, we find him depressed, prostrate, the vital forces stunned, and the indication inferred is, to sustain, by wine and other stimulents, and by powerful tonics. *But we still have Pneumonia.* It never enters the mind that this *must* be a different disease, because we have a new class of symptoms. It is Pneumonia in the second *stage*, and not a new disease. Suppose, however, we should not be called in until the supervention of the second or third *stage*, and find on our first visit, the patient perfectly prostrate, and upon an examination of the case, detect an abscess in the lung, and the tendencies to prostration to resist all our remedies. Shall we conclude that there are two forms of Pneumonia, dependent each on its own cause? That the one is Inflammatory, and the other Typhoid? We think not. Such are the facts in Puerperal Fever. To us, at least, the two cases seem, in this respect, exactly analagous.

Puerperal Fever has its inflammatory, its suppurative and gangrenous stages, and remembering, as we should, the nature of the tissues and organs involved, it should not seem strange that the transitions should sometimes be so rapid as to elude our most scrutinizing investigations. Indeed, we should remember that an inflammation, involving, as this sometimes does, the uterine system, together with most or all the Peritoneum, may often utterly overwhelm and stun the nervous system, in the course of a few hours, so that on our first visit to the case, we should find *extreme* nervous symptoms, &c., demanding stimulants and tonics.

With these obvious facts before us, we can see no necessity for resorting to the idea of a concealed virus, to account for the results. The nature and extent of the inflammation are quite sufficient for the effects. That numerous circumstances may exert a modifying influence on disease, and this, as others,

none will doubt. Constitution, age, habit, climate, cold, attendant circumstances, &c., may, each and all, modify, but not change the character of the disease.

With the knowledge of this law of disease, should it seem strange that parturient patients, crowded together, as they often are, in the lying-in hospitals of Europe, breathing, as they must, the air already impoverished by having been so often appropriated by others, and impregnated by their impurities, should suddenly collapse, and seem as if some fatal blow from an unseen arm had stricken them down? Is it not rather just what should be expected?

It will have been seen from the foregoing, that we do not believe the disease under investigation entitled to the name of *fever*, and consequently hold that the fact that authors have classed it as a distinct form of idiopathic fever has served to obscure it, and lead the mind astray on the subject of its true pathology.

Holding, as we do, that Puerperal Fever is nothing more nor less than inflammation of the uterine system, or some portion of it, or of the Peritoneum, or of the whole, as may happen in any given case, we cannot see why it should receive the name of fever any more than any and all other inflammations *producing* fever as a symptom.

That the pathological character of Child-bed fever is that of inflammation, seems to us indisputable, yet as there are those, and indeed many who differ with us on the subject, it will not be irrelevant to adduce *some* at least of the reasons by which our conclusion is reached.

We cannot claim, as some, to have enjoyed frequent opportunities of post mortem examinations on this subject, but we have the reports of those who *have*, and rely as fully on them for accuracy and truth, as though we had seen with our own eyes, and handled with our own hands, and this we do the more freely, since *all agree* that there are unmistakable signs of inflammation. We say, all agree touching this fact, the only difference worthy of remark being found in the fact, that the advocates of the doctrine of two forms of the disease, claim that there is a form in which the traces of inflammation though manifest, are not in proportion to the malignity of the attack, and that there *must* have been in such cases, a more virulent cause.

Although we think the differences of the disease under different circumstances, and at different *stages* have been sufficiently accounted for, we hope it may not be uninteresting to make a further remark at this point in the discussion.

Keeping before us the fact, that the disease is often greatly, and indeed *strangely* modified by circumstances, we ask indulgence while we state that it is by no means clear to us that Puerperal Fever, or the pathological condition *called* Puerperal Fever, does not sometimes assume other aspects, and present other developments, to which, hitherto, the attention of the profession has not been called.

We are not prepared to assert, but *suggest*, that it may not be impossible, that phlegmasia dolens and mammary abscess are but other developments of this pathological condition, and in common with what is called Puerperal Fever, dependent on uterine derangement for their existence.

Strange and unorthodox as this suggestion may seem at the first presentation, it is hoped the author may not be condemned until heard in his defence. The first thought of any possible connexion between Child-bed Fever and Milk-leg, was suggested to us, by an observance of the fact, that in the incipency of these diseases—the pathological condition of the patient is in every respect precisely the same. So true is this remark that when in charge, or called to a case in the early stage, (say the formative stage,) we have been compelled to wait further developments, to determine whether we were to have a case of Milk-leg or fever. In fact, it should be further stated, that in this stage of the disease, it is impossible to say whether we are to have a normal secretion of milk, mammary inflammation, Milk-leg or Puerperal Fever. We have headache, shivering, rigors, perhaps an ague, succeeded by fever, while there is tenderness in the pelvic or abdominal region, which never fails to excite the interest of the observing physician, and which state of things every physician knows, may result in the secretion of milk or mammary inflammation, in milk-leg or puerperal fever. We have noticed, too, that in fever and milk-leg, there is generally about the same interruption of the lochial discharge, derangement manifest of the womb, and tenderness both in the uterine and ovarian regions, particularly the ovarian.

Further, we have remarked that any one of these developments seems to substitute the others. When we have milk-leg, puerperal fever and mammary abscess are absent, and when we have abscess or fever, milk-leg is absent. We do not assert that this is always the case, but cannot now call to mind an exception to the rule. It is also well known, that milk-leg and puerperal fever greatly modify or arrest the secretion of milk by the mammary glands, thus demonstrating the intimacy and vitality of the relations of these organs. In harmony with the foregoing, it is in place to state that during the year 1855, we observed in this city a strong tendency in parturient patients, to develop child-bed fever, and in some few cases, milk-leg, but no mammary abscess. In our practice the present year (1856), there has not occurred a case of puerperal fever, whilst mammary abscess has been frequent and troublesome. This may all have happened to us, without any such influence as that to which we refer it; but the conviction is strong that there is more of truth than speculation involved.

That metastasés more remarkable do occur in the practice of every physician, all admit; we know, too, that so remarkable are the connexions between the uterus and mammary glands, that the one is constantly affected by the other.

May we not also appeal to the well known fact of vicarious menstruation in support of these views. In this case, by some mysterious law, when the uterus is disabled by disease, so as not to perform its singular function, menstruation, the eye, the nose, the breasts, the stomach, bowels, lungs, and even an ulcer, will take on the uterine office. Is it less rational to suppose, that in harmony with the law of metastasés, the transfer of disease from one to another organ may take place, and that its existence in one may protect another from its invasion?

It is a fact long since established, that protracted derangement of menstruation will superinduce pulmonary disease, perhaps, tubercular deposits and Phthisis Pulmonalis itself, by which is demonstrated the certain and powerful influence of uterine disease upon other and distant organs, a fact which can never be too well understood and appreciated. But we may not pursue this subject further at present.

For the correctness of the remark, that post mortem examinations have demonstrated the existence of inflammation in

the uterine system, or peritoneum, almost or quite uniformly, we must refer to the works of those who have written on the subject. Having already swelled this discussion far beyond our first intention, we fear to intrude further, on the patience of the reader. It is especially requested that the statements and remarks of that deservedly distinguished American author, Professor Meigs, be carefully read and weighed. They claim the highest consideration at the hands of American physicians. See the chapter on "Child-bed Fever," in his work on Obstetrics. In further confirmation of these views, of the pathology of this disease, it may, with great propriety, be asserted that all the symptoms attending it, are just such as would be looked for in such an inflammation as is contended for. Let any man look at the nature, extent and probable effects of the inflammatory action set up, and he will expect the whole catalogue of symptoms so graphically described by our authors.

The causes, too, to which we assign the origin of this pathological condition, seem to us quite sufficient for its production, and in so far as they correspond, to establish the doctrine. We say it is inflammation of the uterus, its appendages, or both, or of the peritoneum, or sometimes of the whole—we say in confirmation, that post mortem examinations have detected unmistakable traces of inflammation—that all agree to this statement—that the symptoms are just such as should be expected in such an inflammation—that the causes to which this pathological condition is assigned, are adequate to the production of such an effect—that the uterus, from its normal state to the end of gestation, and from the end of gestation, through parturition, and its sequences, to the *resumption* of its normal condition, is impelled through changes, vast and rapid, by which, from the nature of things, it is, and *must be exposed to inflammatory action*, to say nothing of the numerous incidental circumstances, as mal-practice in Obstetrics, cold, vitiated air, &c., which may conspire to assail the already enfeebled organ, it seems to us undeniable. And let it not be said, that this argues defect in the works of nature, since gestation and parturition are normal operations. It is true, they are normal, *but it is likewise true, that every operation of nature is liable to incidental evils, as results from normal action.*



Mastication of the food is a normal action, but the very process wears away the teeth, and he who eats must expect the consequences.

The secretion of milk, and suckling a child, by a recent mother, are normal operations, but she who secretes and suckles, may have excoriated nipples and mammary abscess as the results.

## SELECTIONS.

*The Abnormal Conditions of the Kidneys in Bright's Disease.* By AUSTIN FLINT, M. D., Professor of Clinical Medicine and Pathology in the University of Buffalo.

IN 1827, Dr. Richard Bright, of London, announced the discovery that cases of general dropsy, which the researches of Blackall, Wells, Cruikshank, and others had already shown to be frequently associated with the presence of albumen in the urine, are sometimes characterized by a peculiar structural alteration of the kidneys. The validity of this discovery was slowly acknowledged by his professional brethren in the British metropolis. Dr. Christison writing more than ten years after the publication of Dr. Bright's "Reports of Medical Cases," remarks, that in a late visit to London, he was surprised to find the doctrines therein contained still questioned by some medical gentlemen. This backwardness, too common in similar instances to occasion surprise, was confined to his own city. Distinguished pathologists in other parts of the British island, and on the continent of Europe, at once recognized a new field in pathological research; and in the absence of definite knowledge of the nature of the disease newly added to the nosological catalogue, it soon became currently known by the title of *morbus Brightii*, or Bright's disease, a term which, if it be not perpetuated, has been already long enough in vogue to preclude the possibility at any period, however distant, of doubt as to the author of the discovery. Among the first to enter upon investigations pertaining to the disease, was Dr. Christison, of Edinburgh. He published, in 1829, a short paper on the subject, and in 1838, a formal treatise, written with that perspicuity, and pervaded by that candid, philosophical spirit which distinguish all the varied productions of his pen. Dr. Christison designated the disease "Granular Degeneration of the Kidneys." Papers were also communicated to the Edinburgh Medical and Surgical Journal, by Dr. James Gregory. In Dublin, the subject was early investigated by Dr. Jonathan Osborne. In Paris, the new disease at once engaged the attention of Rayer, who was at that time, and indeed at the present moment is occupied with researches pertaining to diseases of the kidney; and in the *livraison* of his splendid "*Traité des Maladies des Reins*," issued in 1837, he treats of it at length under the head of albuminous nephritis, (*nephrite albumineuse*.) In the succeeding year, a distinct treatise on the subject appeared in Paris, from the pen of Dr. Martin Solon. During the last twenty years, Bright's disease has held a prominent place in pathological investigations and discussions, wherever pathology is cultivated. Not to attempt an enumeration of the subsequent numerous writers whose contributions have more or less value, Rokitsansky, of Vienna, Frericks, of Brunswick, Reinhardt, of Berlin, and George Johnson, of London, may be mentioned as the most conspicuous among those whose names are identified with the recent and present literature of the subject.

Dr. Bright regarded the affection of the kidneys, which he discovered, as a peculiar species of degeneration, although he describes it as presented under three forms.\* In this he is followed by Christison, who recognizes the individuality of the disease, and divides it into three stages. Subsequent investigators, however, have ceased to take this simple view of the subject. Dr. Solon divided the affection, after differences in the morbid anatomy, into five varieties. Rayer had already described and figured six. More recently, Rokitsansky has extended the number to eight. These diversities are based on the gross appearances of the diseased organs in different cases, and are supposed to represent certain pathological distinctions of greater or less importance. Dr. Johnson, a still more recent writer, taking microscopical appearances as the basis of his division, treats of five different forms of disease, some of which he regards as separated widely by distinctive circumstances pertaining to the seat and nature of the affection. The simplicity of the subject, as presented by Bright and Christison, is in a great measure lost. Late researches, instead of contributing to its elucidation, tend to render it more complicated. The question, "what is Bright's disease?" is at this time not easily answered. The existence of the disease as an unique malady, has been questioned; and by most of the distinguished pathologists last named, the individuality of the affection is virtually denied, the different forms or varieties being, in fact, according to their views, different forms of disease. On the other hand, investigations directed toward the co-existence of a structural affection of the kidneys with the presence of albumen in the urine, and the occurrence of general dropsy, have invalidated the significance of the latter as constant symptomatic phenomena of the disease. Albuminuria and anasarca are found to occur when an appreciable degeneration of the structure of the kidney has not taken place, and, *per contra*, degeneration of the structure may not be revealed by the excretion of albumen or serous effusion into the areolar structure and cavities. In short, he who undertakes by the study of the literature of the subject, at the present moment, to make himself acquainted with its pathological and practical relations, encounters distinctions, conflicting opinions, and controversies, which can hardly fail to occasion perplexity and discouragement. Such I confess to have been my own experience, and it is with a personal sense of the sentiments just mentioned, that I propose, as a topic of inquiry, what are the general views which, with our existing knowledge, the practical physician is to adopt respecting Bright's disease? In the endeavor to answer this inquiry, the point of view from which I shall survey the subject, is that of a practitioner of medicine who has had some clinical acquaintance with the phenomena embraced under these terms, but who does not profess to have made this branch of pathology the subject of special research. This is the position occupied by the great majority of the medical profession; and none can doubt that the question is an important one. The reality of a grand discovery by Dr. Bright, is unquestionable. Numerous affections, it is sufficiently established, are pathologically associated with disease of the kid-

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\*It is perhaps proper to state that Dr. Bright's "Report of Medical Cases," published in 1827, is not accessible to me; and any references to his doctrines, as therein presented, will be made on the strength of quotations or statements found in other works.

ney. Now, amidst a diversity of doctrines entertained by those who have given to the matter special attention in the way of original research, what is the physician to recognize as the substratum of his faith and practice? In proceeding to the considerations which are opened up by this question, it is needless to premise that I cannot undertake to enter on a comprehensive analytical review of all the facts and doctrines embraced in the recent literature of the subject. I must confine myself to leading points, and the main object must be to endeavor to determine how far the various topics with which pathologists are occupied, concern the medical practitioner. Surveyed from the general points of view in which the subject is of interest and importance to the medical practitioner, we should be led to consider—1. The abnormal conditions of the kidney in Bright's disease; 2. The significance of the presence of albumen in the urine, or albuminuria; 3. The individuality of the affection discovered by Bright, its symptomatology, associated morbid conditions, sequels, pathology, diagnosis, and treatment. This arrangement covers a broad field of inquiry, and I shall limit myself at present mainly to a circumscribed portion, viz: to the *abnormal conditions of the kidney*.

It would be tedious to reproduce in full the descriptions of the morbid appearances distinguishing the different phases of the disease given by the several pathologists who have been named. A condensed summary of the descriptions by Christison, Rokitansky, Frericks, and Johnson, will embody facts sufficient for our present object.

Dr. Christison, regarding the different appearances as indicating successive periods of the disease, recognizes an *incipient, middle and advanced* stage. In the incipient stage, the kidneys are flabby, friable, more or less enlarged, highly vascular, presenting points and star-like spots of ecchymosis. These are the appearances found in certain cases of acute albuminuria; that is, cases characterized by general dropsy and albumen in the urine, and running rapidly to a fatal issue. The pathological condition in this stage is supposed to be that which precedes the occurrence of a morbid deposit in the kidney. Dr. C., however, admits that the evidence of this is incomplete, and considers it not improbable that in some of these cases the disease is neither more nor less than ordinary nephritis. The middle stage is characterized by a morbid deposit. The kidney, when divided longitudinally, instead of presenting "its usual reddish-brown color and the appearance of coarse striæ in nearly parallel lines, lying in a direction from the centre of the organ towards its surface, is grayish-red, grayish-yellow, or reddish-yellow, without any striated arrangement of parallel lines, but of an uniform, sometimes obscurely, sometimes distinctly, granular texture, chequered occasionally with reddish or brownish spots." The deposit, in proportion as it pervades the kidney, apparently supplants the natural structure of the organ. Commencing in the cortical substance, it extends to the portions which dip between the pyramids or tubular cones, and finally may encroach on the latter. The affection thus involves more or less disorganization of the kidneys. The organ, under these circumstances, may be enlarged, preserve its normal size, or undergo some diminution, the breadth of the cortical substance corresponding to these variations. The account given by Dr. C., of the anatomical characters belonging to this stage, depicts appearances which I have repeatedly observed in chronic cases of Bright's disease. In the advanced stage, the disorganization is more complete.

The morbid deposit invades the tubular portions, which may be almost entirely abolished. The kidneys now generally suffer reduction in size; in other words, they become atrophied. The surface is rough or lobulated; the texture abnormally firm. Small cavities or cysts are sometimes observed. On longitudinal sections the cortical structure is occupied "by grayish-yellow degeneration, or by a homogeneous substance somewhat like fatty degeneration of the liver." This is an abstract of the more prominent of the gross appearances as described by Christison. His descriptions, by their clearness, simplicity, and obvious fidelity to nature, will repay a careful perusal.

Passing next to Rokitsansky, this pathologist, as already stated, describes not less than eight distinct varieties. This redundancy of subdivisions, which is a striking feature, if not a serious blemish of his great work on pathological anatomy, renders his account of the morbid appearances rather tedious and complicated. Condensed as much as possible, the distinctive characters of the several varieties are as follows: 1st. The characters which belong to the incipient stage as described by Christison. And Rokitsansky states that "we should be obliged to consider the condition as one of very acute simple inflammation of the kidneys, were it not that the characteristic general symptoms and the constitution of the urine established it as a case of Bright's disease." 2d. "An infiltration of a grayish or grayish-red, or yellow, viscid and turbid fluid," pervading the organ uniformly or in diffused spots, small punctiform or triated ecchymoses here and there, the tissue presenting a combination of partial anæmia and hyperæmia. The organ increased in size and weight. 3d. Considerable enlargement in size and weight. The cortical substance completely anæmic, tense, friable and infiltrated with a large quantity of opaque, milky white, or yellowish fluid. The superficial layer more particularly, but also the deeper-seated parts, made up of white or yellowish-white granules, (Bright's granulations,) of the size of a poppy seed, or pin's head. The portions of the cortical substance which dip between the pyramids increased and the latter therefore compressed. The granular cortical substance sometimes forcing its way between the tubuli causing the pyramids to present a frayed or unravelled appearance. The renal fascia easily detached. The mucous-membrane of the calyces and pelvis reddened. 4th. Considerable increase in size and weight. The consistency diminished, the tissue very friable and gorged with a large quantity of milky white or yellowish juice. The granulations exceeding the size of millet seeds and equal to that of hemp seeds, and they may project from the surface of the organ. The renal sheath almost unattached. 5th. The kidneys enlarged, or of normal size, or *reduced in bulk*. The surface granular and nodulated, and in some portions irregularly furrowed and indented, and cicatriform. The cortical tissue coarsely granulated, very vascular and congested. Cysts containing various substances, and varying in size from that of a poppy seed to that of a pea or nut, scattered here and there. *The attachment of the fascia propria more intimate, and the fascia is thickened.* The pyramids small and atrophied. 6th. The organ but little increased in size and weight. The cortical substance presenting a few undefined patches of a pale color, the prevailing hue pale red, white, yellow, or ashy, and infiltrated with inspissated matter, resembling thick cream or coagulated albumen. *The consistency of texture normal or abnormally increased.* The pyramids, calyces and pel-

vis normal. 7th. Trifling increase of size, or partial atrophy. *Density increased.* The cortical substance presents patches of a dull white color without defined borders, arising from a coagulated albuminous lardaceous-looking substance in which no trace of the renal tissue remains. The organ presents the appearance and consistency of fatty cartilaginous tissue. One or more of the pyramids occasionally undergo a similar metamorphosis. *The fascia propria is agglutinated to the diseased portions of the kidney and thickened.* 8th. The kidney of normal size or slightly increased, and considerably indurated. The general hue dirty red or brownish-yellow, and the cortical substance presents a fatty gloss, is unusually hard and brittle, and infiltrated with an albuminous, lardaceous and transparent substance. Occasionally a whitish flocculent deposit is seen in the tissue, of the shape of fine granular dots and lines, giving to the surface and sections a marbled appearance.

It is not easy to obtain a very clear idea of the distinctive characters which distinguish severally these varieties, and the propriety of describing all of them as different forms of the disease, is not apparent, more especially as Rokitsky states that they may be complicated with one another, and since he considers the second, third, and fourth forms as representing "progressive stages or degrees of the metamorphosis occurring in Bright's disease." The fifth form he regards as the "last link of the metamorphosis, with it the process becoming retrograde and the disorganized tissue of the viscus, presenting the condition of secondary atrophy." Now on reference to the characters which distinguish the fifth variety from the forms which precede, they are found to be, reduction in the size of the organ, which is not constant but occasional; greater consistency of texture; an irregularly furrowed, indented, cicatriform appearance of the surface, and a more intimate attachment of the fascia propria. These points I have italicized in the abstract of Rokitsky's description. The second, third, fourth and fifth forms, more particularly represent Bright's disease, and Christison's granular degeneration of the kidney. The sixth and seventh forms represent the less frequent or chronic varieties of the disease, and the latter, (quoting his words,) "must be looked upon as the terminal point of the metamorphosis, as the product of the disease is retained in a state of condensation and organization, and subsequently shrivels up." The eighth form, Rokitsky regards as invariably chronic *ab initio*, and springing from inveterate scrofulous or rickety disease, but especially from syphilitic and mercurial taint, and is associated with analagous affections of the spleen and liver, in the shape of lardaceo-albuminous infiltration."

Before proceeding to notice the descriptions by Frericks, and Johnson, I shall state more fully the views of the two pathologists just referred to, as regards the morbid process or processes which these appearances involve. The sensible characters constitute the morbid anatomy, but what are the abnormal conditions underlying the visible changes which the organ undergoes? Here will be found differences of doctrine, and these diversities, it is evident, in some instances, have had more or less agency in determining the arrangement of the morbid appearances, if not, indeed, the descriptions of the anatomical characters.

Dr. Christison describes the abnormal changes without any hypothesis as to the process or processes which give rise to them. He says at the outset, that the exact nature of the degeneration is not ascertained. He

compares the deposit to that of tubercle. Rokitansky considers Bright's disease to consist in an inflammatory condition. He uses, however, the term inflammation in a wide sense, embracing the process by which "most, and in a certain sense all general diseases become localized." Tuberculosis, in his view, is equally inflammatory. He also, as already stated, regards the varied anatomical characters in Bright's disease as due to metamorphosis of a morbid exudation in the kidney. The latter idea is more fully developed in the theoretical views of Frericks.

Dr. Frericks published a monograph on Bright's disease in 1851, sustaining a doctrine previously advanced by Dr. Reinhardt, of Berlin, which has the recommendation of reconciling the diversity of anatomical characters with the unity of the disease. The doctrine has met with favor not only in Germany, but, prior to the publication of Dr. Johnson's work, in Great Britain.\* He resolves the affection into three stages. The first stage is characterized by congestion and exudation. Under the second stage the exuded matter, which is the plasma of the blood coagulated within the Malpighian tufts and convoluted tubes, undergoes fatty degeneration. The absorption of this fatty matter characterizes the third stage. The fatty matter being absorbed, the kidney is left more or less damaged according to the amount of permanent injury which it has received from the previous changes. The diversity of appearances are explained, after this theory, by the various circumstances pertaining to the deposit, its transformation and removal by absorption. In the first stage the kidney is enlarged from hyperæmia. The surface of the organ is smooth, and the fibrous capsule more easily stripped off than usual. The deposition is going on in this stage. In the second stage, the organ is still larger than natural, but from the fibrinous exudation, and not from hyperæmia. The appearances due to the latter disappear, and the tissue presents the pale yellow hue distinctive of fatty degeneration. The accumulation of fatty matter in the tubes gives rise to the granulations, and the roughening of the external surface. The tissue in this stage is friable. In consequence of the absorption of the fatty matter in the third stage, atrophy of the organ ensues. And as the process of absorption goes on unequally in different portions, the irregularities on the surface rendering the kidney nodulated, are accounted for. More or less wasting of the organ occurs; the texture becomes dense, and the investing capsule adheres closely. To quote from the English reviewer, the following is a summary of the doctrine of Reinhardt and Frericks: "An engorgement of the renal blood vessels, an effusion of inflammatory products, a more or less complete and general metamorphosis of these products into fat, and, finally, atrophy and wasting of the kidney. The small contracted granular kidneys have once been fat; the large, pale kidneys are in continual progress towards atrophy and contraction."

The primary and essential morbid condition, according to Reinhardt and Frericks, is inflammation. The former, indeed, designates the first stage, the *simple inflammatory stage*. Without stopping to comment on the doctrine thus briefly stated, which is certainly attractive from its plausibility and simplicity, we pass to the more recent, and more complicated views of Dr. Johnson.

\*I am indebted for the account of Frerick's views, mostly to a review by Dr. Johnson in the *British and Foreign Med. Chir. Rev.*, Jan. 1853, and to an article by Prof. J. C. Dalton, Jr., in the *Buffalo Med. Journal*, March, 1853.

Dr. Johnson describes several pathological conditions of the kidney giving rise to the symptoms which are supposed to characterize Bright's disease.\* He adopts, as the basis of his division, the phenomena furnished by microscopical observations. The reliability of this basis will be the subject of remark presently. The following are the several forms of disease, which he regards as more or less distinct from each other: 1st. Acute desquamative nephritis. 2d. Chronic desquamative nephritis. 3d. Waxy degeneration of the kidney. 4th. Non-desquamative disease of the kidney. 5th. Fatty degeneration of the kidney. The significance of these titles is derived not exclusively from the morbid appearances of the organ, but also from certain abnormal products revealed by the microscope, in the sedimentary deposit in the urine. To render the distinctions intelligible it will be necessary to make some reference to the latter.

1. *Acute desquamative nephritis*.—The size and weight of the kidney are increased. The surface is smooth, and the capsule easily stripped off. Certain portions of the capsular surface and the internal structure are more vascular than natural, and other portions are exsanguine. Ecchymosed spots are observed. The consistence in young and adult subjects is increased, but in aged persons diminished. These appearances accord mainly with those belonging to the incipient stage of Christison, and the stage of engorgement of Frericks, and the first of the eight forms described by Rokitsansky.

Microscopically examined, the convoluted tubes which form a large part of the cortical substance, are more or less filled and distended with epithelial cells, which may sometimes be squeezed out forming "*epithelial casts*," such as are observed in the sediment of the urine. Some of the tubes are filled with extravasated blood. The vessels constituting the Malpighian tufts are thickened and filled with blood-corpuscles, which are larger and of a lighter color than natural.

The sediment of the urine during life, contains "numerous cylindrical bodies composed of fibrin, which, having exuded from the Malpighian bodies, has coagulated in the tubes, and escaping thence, presents solid cylindrical moulds of the interior of the tubes, in which are entangled blood-corpuscles and epithelial cells which have been shed, by a process of desquamation, from the surface of the tubes." To the casts thus characterized by the presence of recently formed and entire epithelial cells, Dr. Johnson gives the name of *epithelial casts*. Their average diameter is about  $\frac{1}{70}$  inch.\*

So far as the local affection is concerned, Dr. Johnson regards this form of disease as an acute inflammatory process seated in the lining membrane of the convoluted tubes—a catarrhal affection as it were, of these tubes.

2. *Chronic desquamative nephritis*.—This succeeds the acute affection, and offers a variety of gross appearances which the author explains by the changes supposed to be discovered by means of the microscope. Diminution in weight and bulk as the disease advances, is a result more con-

\*On the Diseases of the Kidney, their pathology, diagnosis, and treatment, with an introductory chapter on the anatomy and physiology of the kidney. By George Johnson, M. D., Lond., etc. London, 1852, 8v., pp. 517.

\*These casts and the other varieties subsequently mentioned, are figured in Dr. Johnson's work.



stant than any other. The wasting affects first the cortical substance, and a result is the obliteration, more or less complete, of the lobular divisions on the capsular surface. In some instances, the kidney continues to waste and retains its smoothness of surface. In other instances, the decrease in size is less marked, and the cortical substance presents a yellowish-white, firm, and wax-like appearance, attributed to the deposit of the waxy casts, presently to be described, in the convoluted tubes. The vascularity of the organ is least where the deposit is most abundant. The contraction of the deposit gives rise to firm white granulations varying in size from a pin's head to a pea, by which the capsular surface of the kidney is often roughened.

Cysts are frequently observed of various sizes, but they are comparatively rare in cases of extreme atrophy of the kidney. With reference to these cysts, which have been already embraced in the previous descriptions, Dr. Johnson considers them as formed by dilatation of the convoluted tubes at certain points. On the other hand, Mr. Simon contends that they are "abnormal developments of epithelial germs; his theory being that certain diseases of the kidney tend to produce a blocking up of the tubes; that this obstruction, directly or indirectly, produces rupture of the limiting membrane; and that then, what should have been the intra-mural cell-growth, continues with certain modifications as a parenchymatous development." This view is sustained by Rokitsky and Paget. Dr. Johnson devotes considerable space to the discussion of the subject; but it is obviously more interesting as a scientific question, than practically important.

Chronic desquamative nephritis, Dr. Johnson regards as a chronic inflammation of the renal tubes, characterized by a long-continued shedding of epithelium, which appears in the urine in a disintegrated state. "The tubes gradually lose their epithelial lining, and, subsequently, become atrophied, or filled with some new and frequently an unorganized material; or, lastly, they continue to be nourished, secrete serum, into their cavities, and so become dilated into cysts. The kidney in the advanced stages is commonly, but not invariably, much wasted, its substance firm, and its surface irregular."

The sediment in the urine, examined microscopically, is found to contain cylinders, composed of a granular material, which Dr. J. distinguishes by the title of *granular casts*. The material he regards as disintegrated epithelium. At a later period, other casts are observed mixed with the granular casts. These are of larger size, having a peculiar whitish, waxy appearance, and a well-defined short outline, their diameter being about  $\frac{1}{100}$  inch. The size of these casts is about the same as that of the renal tubes, and they are considered as having been moulded in tubes which have been deprived of epithelial lining by the desquamative process.

3. *Waxy degeneration of the kidney.*—Certain cases are characterized by the abundance of the waxy casts, just described, in the sedimentary portion of the urine; and they may neither be preceded by, nor associated with, the true desquamation, either in an acute or chronic form. Dr. Johnson considers these cases as constituting a distinct form of disease. The cortical substance of the kidney presents an anæmic and pale waxy appearance, forming a strong contrast with the medullary cones. It may be remarked here, that, even assuming the correctness of the basis of Dr. Johnson's divisions, the propriety of making this a distinct form of dis-

ease, is certainly questionable. The size of the waxy casts, however, as significant of the absence of epithelium, and denoting an advanced stage in the progress of disease, is both interesting and important.

*Non-desquamative disease of the kidney.*—This form is distinguished from the preceding forms, by the absence of the evidence of desquamation of the epithelium of the renal tubes. Cases presenting this distinctive feature, according to Dr. Johnson, may be acute or chronic. In cases of the latter, the kidneys are, usually larger and heavier than natural—the increase in weight exceeding that in bulk. “The most constant and characteristic appearances are gradually increasing wax-like pallor of the cortical substance, and a loss of the color which depends on its vascularity, while the medullary cones retain their vascularity, and have a pinkish color. As the disease progresses, the lobular markings generally become obliterated over a large portion of the capsular surface, until at length there remain only a few small, isolated, vascular patches, as represented in Dr. Bright’s fourth plate.\*

Hæmorrhagic spots are scattered here and there in the cortical substance. The capsule is readily removed. The surface is smooth and ungranulated. The kidney admits of being injected only to a very limited extent.

Microscopically examined, the convoluted tubes generally appear to be simply more opaque than usual. The absence of a morbid deposit within the tubes, is the distinguishing negative feature. Dr. Johnson accounts for the increase of size on the hypothesis of hypertrophy.

5. *Fatty degeneration of the kidney.*—Fatty degeneration of the kidney consists of two varieties, viz.: 1. *Granular fat kidney*; and 2. *Mottled fat kidney*. *Granular fat kidney*, Dr. Johnson regards as in some cases eventuating from the form last noticed, viz.: non-desquamative disease, and in other cases succeeding acute desquamative inflammation. The kidneys present the general characters just described as belonging to non-desquamative disease. Their size and weight are increased, the surface is smooth, and the cortical portion is pale and non-vascular. They are characterized, in addition, by yellowish-white granulations, which resemble the so-called atheromatous patches in arteries, are found, on a microscopic and chemical examination, to be composed almost entirely of fatty matter. A large proportion of the convoluted tubes, under the microscope, present the same appearance as the non-desquamative form last described; but some contain the white wax-like material, and occasionally some are filled with blood, giving rise to hæmorrhagic spots which are visible by the naked eye. The characteristic appearance just mentioned of this form of disease is due to the presence of oil-globules in a greater or less proportion of the tubes. The oil is formed in the epithelial cells, and it exists in abundance in proportion to the progress made in the process of fatty degeneration. As this process advances, the cells assume a globular or oval form, and when completely filled with oil-globules they appear opaque and dark. Rupture of the tubes frequently takes place from over-distension by the enlarged cells containing oil. The oily or fatty nature of the material

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\*The lobular divisions of the kidney in health, are pentagonal or hexagonal in form, and average about one-eighth of an inch in diameter. They bear an analogy to the lobules of the liver.

forming the yellow granulations visible with the naked eye is shown, first, by the peculiar and characteristic appearance of the globules when examined by the microscope; and secondly, by the fact that both the granulations seen by the naked eye, and the globules visible by the microscope are entirely removed by digestion in ether. The fatty granulations may be few in number, or thickly disseminated through the cortical substance. Dr. Johnson admits that some of the oil is a product of a metamorphosis of a fibrinous or albuminous effusion into the tubes, but he thinks a small portion only has this origin, the greater part being contained in distinct cells.

The sediment of the urine in this form of disease is found to contain small waxy casts, in which are entangled a few globular or oval cells enclosing a variable number of oil-globules. This constitutes a distinctive trait of the present form of disease, contrasted with that last noticed, which is ascertained during life.

In *mottled fat kidneys*, the organ is usually increased in size and weight; the color of the cortical substance is either uniformly pale, or more frequently mottled by red vascular patches, and occasionally hæmorrhagic spots are observed; the medullary cones retain their natural color and vascularity; the kidney is usually softer than natural. Microscopically examined, everywhere the convoluted tubes are found to be greatly distended with oil, which has accumulated in their epithelial cells. The oil-globules are of a larger size than in the granular fat variety. The yellow granulations visible by the naked eye in the former variety, are not apparent in this, these granulations being the result of certain tubes distended with oil, while the surrounding tubes are nearly or quite free from this material. In the mottled variety, the peculiar appearance arises from the convoluted tubes being almost invariably and equally filled with oil. In this variety, a large quantity of oil is obtained from the kidney by chemical analysis; even so large a proportion as  $\frac{1}{3}$  of the solid substance has been found to consist of this matter.

Advanced fatty degeneration, in the opinion of Dr. Johnson, is the most hopeless form of renal disease. And when this condition is indicated by urine highly albuminous, and by the presence of numerous oily casts and cells in the sedimentary deposit, he regards the malady as not less serious and intractable than tubercular disease of the lung. In waxy degeneration and non-desquamative disease, the prognosis is less favorable than in the acute or chronic variety of the desquamative form.

Assuming the correctness of the observations of Dr. Johnson, (and certainly I am not prepared to question their accuracy), it is obvious that the foregoing classification rests measurably on speculative ground. Without specifying points purely hypothetical, which will suggest themselves to the reader, the adequateness of microscopical appearances to serve as a basis of the pathological distinctions involved in his division and descriptions, is inadmissible. By this remark, I am far from intending to disparage the microscope in researches pertaining to morbid anatomy. Its great value in this relation is unquestionable. And with respect to the abnormal conditions of the kidney in Bright's disease, its utility is not to be denied. But to predicated the anatomical characters of disease solely, or even mainly on the revelations of the microscope, there is this serious if not insuperable objection, viz: the examination cannot, without an immensity of labor, embrace the totality of the organ

or part diseased, but must be limited to extremely minute portions. This difficulty is well expressed in the following quotation from a paper by Dr. T. K. Chambers, on the subject of the present article. "In microscopic researches, no count can be kept of what is, practically speaking, one of the most important elements of pathological classification—namely, the extent of distribution of morbid processes. The existence of a particular diseased state in the small piece or pieces which are submitted to the lens may be easily made evident; but whether this diseased state is an accidental local circumstance, or is spread through the organ in such amount as probably to interfere with its functions can only be judged by the naked eye. To set down microscopic deviations from health as *the* disease would lead to mistaken views. For example, the hearts of few chronic invalids can be examined without some part of the muscle exhibiting that granular condition which is found when the fibre is about to become oily, but to designate all these hearts as instances of fatty degeneration, and to suppose that they had any calculable influence on the duration of life, as distinct from the general diathesis, would surely be a serious error. Yet such, I think, would be the result risked by adopting microscopic appearances as a principle of pathological division."\*

We come now to the question, What are the ascertained facts respecting the abnormal conditions of the kidney in Bright's disease, which it behoves the physician to know and recollect? In other words, what are the points pertaining to the descriptions and distinctions just passed in review, which are satisfactorily established, and which possesses practical importance? Eliminating all that is doubtful or superfluous, and it will be found that observations since the publications of Bright and Christison have not added much that is positive and practically useful to our knowledge of the morbid changes incident to the disease. I shall attempt to embody in a few words, the sum of what is actually known of these changes, in so far as concerns their nature, seat and pathological relations.

1. It is abundantly established that albuminuria may exist, together with anasarca and other symptomatic phenomena, and death take place without a morbid deposit in the kidney sufficient to give rise to an appreciable alteration in its gross appearances. In certain cases it is to be found to be simply more or less engorged, enlarged, and friable, the capsule easily detached owing to serous effusion into the subjacent areolar tissue; and in some instances, even these morbid characters are wanting, the organ appearing to be healthy. Dr. Johnson gives a case exemplifying the fact last stated, under the head of "non-desquamative disease of the kidney." In most of such instances, according to Dr. Johnson, microscopical examinations would be expected to reveal morbid conditions of the renal epithelium. But his own observations show that if this be the rule, it is not without exceptions. And these exceptions render it extremely doubtful whether Dr. Johnson be correct in regarding the epithelium of the convoluted tubes as the point of departure of the local affection in the cases included under the head of "desquamative nephritis." To deny that the evidence of desquamation of the renal epithelium is afforded during life and after death in some cases and not in

\*Decennium Pathologicum. Brit. and For. Med. Chir. Rev., April, 1853.

others, would be to question the accuracy of Dr. Johnson's observations. But it may fairly be doubted whether this constitutes a radical pathological distinction, and the propriety of the nosological division into desquamative and non-desquamative disease is therefore questionable. The simple fact is, that in certain of the cases characterized by the phenomena of Bright's disease, the sediment of the urine abounds in casts, and they are found in the convoluted tubes after death, while in other cases the urine is free from casts and none are discovered in the tubes.

It may be remarked here, that the existence of Bright's disease as determined by the symptoms during life, without any appreciable lesion of the kidney being apparent after death, is a strong argument in favor of the doctrine that the essential pathology of the affection involves blood-changes anterior to those occurring in the kidney. In these cases the disease runs a rapid course. They are cases of *acute* albuminuria; and it may be presumed that the fatal termination occurs too quickly for those morbid alterations in the structure of the kidneys to take place which are generally found in chronic cases. The opinion held by most pathologists is, that prior to the lesions due to a morbid deposit, for a greater or less period the only appreciable morbid condition is a state of congestion or hyperæmia; in other words, that this condition is the first link in a chain of sequences. However probable this may be, it is only an inferential conclusion, not an ascertained fact.

2. In most chronic cases presenting the symptomatic phenomena characteristic of Bright's disease, structural lesion of the kidneys is manifest. The appearances are by no means uniform, as has been seen in the numerous varieties described by distinguished pathological observers. In accounting for the diversity of morbid changes, there is scope for speculation, and it is important to discriminate between that which is ascertained and that which is hypothetical. A just ground for a division is the existence, or not, of atrophy of the kidney. The organ may be increased in bulk, or retain its normal size on the one hand, and, on the other hand, its volume may be more or less diminished. What are the facts pertaining to the non-atrophous condition? The appearances are due, directly or indirectly, to the presence of a morbid deposit, doubtless primarily taking place within the convoluted tubes and capsules of the Malpighian bodies which form the cortical substance of the organ. The deposit occurs first in the peripheral portion of the cortex, and progressively advances from the surface to the centre, extending at length between the tubular cones, and even between the individual *tubuli*, and finally encroaching more or less on the space which belongs to the medullary portion of the organ. The character of this deposit, as studied in different cases, differs considerably. It may consist of coagulated fibrin, with or without blood corpuscles; accumulated epithelium, oil globules and granular fat—these varieties being either separate or more or less combined. The gross appearances will differ according to the character of the deposit, the extent of its diffusion, and its abundance in the portions affected. The size of the organ, its color, its consistence, the irregularity of its surface or its smoothness, the absence or presence of the lobular markings, etc., will depend on the variations just referred to in connection with local hyperæmia or anæmia, the latter resulting in a great measure from the presence of the deposit. These are facts pertaining to the morbid anatomy of the disease. Now as to the relations

of the different forms of deposit to each other, and still more their relations severally to ulterior pathological conditions, opinions, with our present knowledge of the subject, must be speculative. It may fairly be doubted whether we are authorized to base on these diversities of appearance important pathological distinctions. Whether the exudation of fibrin be the primary step in the processes of structural alteration, and the detachment of epithelium be simply a mechanical result, according to Frericks; or whether the epithelial cells first become affected, and are shed in more or less abundance as a consequence of an effort to eliminate a morbid material from the blood, as contended by Johnson, must be considered a question open for discussion and farther investigation. So with respect to the different kinds of deposit; do they severally preserve their peculiar character, or do they succeed each other? This question has an important bearing on another, viz.: whether the various morbid conditions grouped under the title of Bright's disease, are different stages of a single affection, or, in fact, constitute different affections? In fatty kidney, was the original deposit fat, or does this species of degeneration take place as a sequel to albuminous exudation? Assuming the latter to be true according to the theory of Reinhardt and Frericks, does fatty degeneration occur by *conversion*, as contended for by the authors just named, and also admitted in part by Johnson, or must this change always of necessity take place by *substitution* in this as well as other situations, on the principle adopted by Robin and others, that protein substances never undergo metamorphosis into fat? These are questions of scientific interest, which we must at present consider as unsettled. So, also, with respect to the nature of the morbid action which gives rise to the deposit, is it, or is it not, inflammatory? In other words, does Bright's disease involve nephritis? This question belongs in the same category as the foregoing. If the fact of fibrinous exudation be sufficient evidence of inflammation, then, unquestionably, this process is often involved: but the inquiry arises whether, in view of the capillary vessels which form the Malpighian tufts, lying loose and uncovered within the dilated extremities of the convoluted tubes, it is not quite probable that mere congestion may lead to the effusion of the liquor sanguinis in this situation.

There are various morbid appearances which are evidently due to merely accidental circumstances. Such are the stellated spots of ecchymosis, the cysts ascertained by the microscope, and also by the naked eye, attaining in some instances to a considerable size, and inflammation of the mucus membrane lining the calyces and pelvis. I mean by the term accidental that they have no necessary connection with the local morbid conditions belonging to the disease. In this respect they differ from changes incidental to a morbid deposit, such as increased breadth of the cortical substance, friability, anæmia, etc.

3. The foregoing remarks have had reference to non-atrophous kidney. A marked reduction in size constitutes in itself a highly distinctive feature of a class of cases of Bright's disease; but it is associated with peculiar morbid appearances pertaining to the form and the internal structure of the organ. The atrophy not going on equally in every part of the kidney, gives rise to an uneven lobulated surface; to the granulated aspect, the cicatriform furrows, and the puckerings which are observed under these circumstances. The texture becomes hard and resisting. The capsule adheres with an unnatural firmness, so that in peeling it off small portions of the substance of the kidney are torn away with it. The

wasting affects primarily and chiefly the cortical portion, which is sometimes reduced to an extremely thin layer, the normal structure, in fact, entirely disappearing.

Pathologists generally are agreed in regarding these changes as consecutive to those which belong to the non-atrophous condition. The morbid deposit first supplants the normal structure; and, in fact, it induces atrophy of this structure, while the bulk of the organ (owing to the presence of the deposit) is not diminished. The reduction in size takes place as the result of the elimination of the morbid deposit within the tubes, possibly its removal in a measure by absorption, together with the contraction or carnification of portions which remain. Many interesting questions are involved in the mechanism of these alterations; but, with our present knowledge, they would lead only to opinions and hypotheses, not to fixed facts of science.

In attempting to determine by means of an analysis, and a comparison of the observations of different pathologists, the sum of our actual knowledge of the abnormal conditions of the kidney in Bright's disease, we are led to the conclusion that the subject is still shrouded in confusion and difference of doctrine. But this is not surprising; nor does the fact militate against the individuality of the disease. To cite an illustration which has been used for this purpose by more than one writer, until quite lately the morbid anatomy of tuberculosis of the lungs offered not less scope for doubts, discussions and diversity of opinion. Even more important questions remain to be settled. The nature of tubercle, its primary seat, the local process upon which the exudation depends, its dependence on a peculiar diathesis, the changes which the deposit undergoes, the mode in which they are effected, the relations of the different forms of deposit to each other, etc., etc., are points of scientific interest and practical importance, which are becoming understood in consequence of continued investigation. But, notwithstanding, they have not been heretofore, and are not yet, in all respects, explained, the existence and the unity of the disease called pulmonary tuberculosis, has not been questioned. So with regard to the morbid appearances of the kidney in Bright's disease; when the lesions on which they depend are more fully known, their mutual relations will be apparent, and it will probably be more evident than at present, that their pathological origin is not in the kidney, but that the changes in this organ constitute the local expression of a peculiar dyscrasia.

Passing from the consideration of the morbid anatomy of the disease to its pathological consequences and clinical history, we enter on a field more satisfactory and attractive. The obscurity which hangs over the anatomical characters does not pervade, to the same extent, the immediate effects of the structural lesions. These effects consist, 1st, of the transudation into the uriniferous tubes of certain of the elements of the blood; and, 2nd, of a deficiency or absence in the urine of certain important constituents of that excretion. Taking these immediate effects as a point of departure, and determining remote consequences by means of clinical observations, the study of the disease becomes at once invested with great interest as well as importance to the physician. We may resume the subject at some future time, with the hope of making some amends to the reader, for the tedious and dry details which necessarily belong to the consideration of the branch to which our attention has been restricted in this article.—*Louisville Review.*

*Additional Remarks on Vesico-Vaginal Fistule and the comparative value of the Clamp and Button Sutures.* By N. BOZEMAN, M. D., of Montgomery, Alabama.

IN some editorial remarks which recently appeared in the American Medical Gazette, and the Nashville Medical and Surgical Journal, a statement which I made in an article on Vesico-Vaginal Fistule, published in the May number of the Review in regard to the success of the clamp suture in the treatment of this affection, is not only called in question, but absolutely asserted to be unfounded. This statement was, in effect, that; to the best of my knowledge, the clamp suture of Dr. Sims has failed in as many trials as it has succeeded, or, in other words, that in a given number of operations—not cases—the clamp suture fails in one half. The effect of a positive contradiction from two such sources, although not substantiated by any reference to statistics or facts, being to place me in an unpleasant attitude before the profession, I am compelled in justice to myself to explain the grounds upon which my opinion was based.

I have no means of knowing any thing about Dr. Sims' practice since he left this city, nor do I wish to disparage it in the least. I can only speak of what I saw and knew of his success previous to his removal to New York. For three or four years I assisted him in many of his operations, and witnessed their results. There are also several other physicians in this community who saw even more of his operations than I did; and not one, I venture to say, will deny that I did, in the statement referred to, more than full justice to Dr. Sims.

No one, I presume, who reads my paper in this journal with ordinary care, could fail to discover that my object in bringing the button suture before the profession, was simply to present a comparison of its results with those of other methods. The statement as to the clamp suture was made in a general way. I referred to its employment by no one in particular excepting myself. I need scarcely say, this was done from personal friendship to Dr. Sims. I was sufficiently acquainted with the results of his practice, to know that they would not compare favorably with what I had obtained by the button suture, and I could then have produced the same facts in support of this assertion that I am now forced to make public. It appears that the statement referred to, is considered as applying to Dr. Sims alone. As it has been placed upon that footing, I am perfectly willing that it should stand so. I shall be abundantly able to prove, if it becomes necessary, that *not one half* of his individual operations before his removal to New York, were successful.

It will suffice for my present purpose to allude to those cases in which I applied the button suture with entire success, after Dr. Sims' suture had failed in his own hands. The report of two of these, (cases I. and II.) is appended to my former article. The former, I mentioned, had been operated upon *once*, and the latter *several times* according to the method of Dr. Sims. Case II., was under his treatment for more than three years, and I am satisfied he performed upon it not less than ten or a dozen operations, several of which I assisted in myself. Upon another case, (Mrs. H., of Auburn, Ala.,) whom I have just cured, he operated twice.

My own experience with the clamp suture amounts to eight operations,



six of which were complete failures. Two of these operations were performed upon a case in which Dr. Sims had met with no less than five or six failures. The case was discharged uncured. There are other cases within my knowledge, upon some of which Dr. Sims performed so many operations that the patients themselves have no recollection of the number. Such is my knowledge of the results of the clamp suture, such the foundation upon which I rested the opinion that the number of its successes did not exceed the number of its failure.

As additional support to the advantage claimed for the button suture, I may here state that since the preparation of my paper referred to, I have performed nine other operations, making in all, sixteen. Of this number, only one partial failure has occurred. This was my twelfth operation, and resulted solely from carelessness on my part, in not giving the button a proper shape. Several of these cases were very interesting. In one, the fistulous opening was about an inch in length, and complicated with a rent in the anterior lip of the cervix uteri. Both fistule and rent were closed at one sitting. This is the second case, with this complication, which has come under my observation; the other I operated upon last year, and may be found reported in the Southern Med. and Surg. Journal for Aug. 1855. So far as my knowledge extends, this is the first case of the kind which has been recorded. Dr. Sims informed me that he had performed the same operation shortly after my report appeared. In another one of these cases, the fistulous opening was nearly an inch and a half in its transverse diameter, and the anterior lip of the cervix formed its posterior border.

The most remarkable case, however, was one in which nearly the whole of the septum had sloughed out. The opening was somewhat of a quadrangular shape, and so large that the superior fundus of the bladder protruded through and appeared at the vulva in the form of a large fleshy tumor. It measured transversely an inch and three quarters, and longitudinally about an inch and a half. The anterior lip of the cervix uteri formed, as in the preceding case, the posterior border of the chasm. Both ureters were exposed to view and seemed to open on the vaginal side of the septum, which appearance resulted from an eversion of the edges of the fistule. The procedure adopted here was to pare thoroughly the edges, and then slit both ureters on the vesical side of the septum to the extent of a quarter of an inch. The object of this was to throw the entrance of the urine into the bladder away from the approximated edges of the fistule. This having been done, the cervix uteri was next brought down and secured to the anterior border of the opening which was immovable. The button used in this instance was semicircular in shape and nearly two inches in length. The sutures, eight in number, formed parts of the radii of a circle whose centre was about half an inch above the os uteri. In no case could the result have been more satisfactory, and a most interesting circumstance was that the cervix and part of the body of the uterus were made to close the fistulous opening.

The stiches in both of these cases were taken in the anterior lip of the cervix, just as though it had been part of the vesico-vaginal septum. I am not aware that an operation similar to these has ever been performed by any one else in this country—at least I have never seen one reported. As to applying the clamp suture in either one of these cases, it would have been utterly impossible with any reasonable hope of success.—*Louisville Review.*

*On the Constitutional Effects of Anæsthetic Agents.*—By J. HENRY CLARK, M.D., of Newark, N. J.

New remedies, like new systems of medicine, are usually inaugurated with extravagant promises. Zealous advocates adopt and publish the most flattering encomiums upon the last Eureka, which, unlike its predecessors, is quite certain never to sink below the high elevation upon which they have placed it. Little observation is necessary to note how speedily the experience of practical men determine the real position of all these newly discovered dogmas and remedies. Many remedies most highly praised never find a permanent place in the estimation of the practitioner, and very many so-called systems which are ushered in with great eclat, which secure much popular favor, and find many advocates, leave scarce a single contribution to the treasury of science, or add the smallest stone to that temple which we are ever striving to rear. A volume could be composed of new discoveries, each of which, in their day, furnished subjects for the journals, medical and secular, the very names of which have long since dropped from memory and record. It is scarcely necessary to refer to stramonium that was to cure all epilepsies, the remedy for hydrophobia; the styptic, that was to control all hæmorrhages; the digitalis, that was to control the heart; and the ergot, which was certain to relieve most of the difficulties of the lying-in chamber. These and a host of others have taken useful places in the list of appliances, by means of which the physician may often control disease, usually fulfilling one or two, instead of many, medications. In the same manner many of the "isms," "pathy," and "specialities," after making fortunes for quacks, have their day with the public, (who forget all about them, their attention being devoted to a new one just rising,) and at length become sifted, and the truth, often the merest kernel, is added to the list of tested and reliable facts.

One of the latest discoveries that has challenged investigation, that has furnished the subject of many a newspaper paragraph, and many a chapter for our medical journals, is that of chloroform. It was introduced as one of the discoveries that would immortalize its originators. They have been rewarded with high honors and Government appropriations. The new discovery has furnished an illustration of progress and development for the orator and the author, who have regarded it as the panacea for physical suffering, even that which was entailed upon our race, in the curse pronounced upon its maternal progenitor. It was resorted to freely if a tooth was to be extracted, or a toe-nail removed. Surgeons were recommended to use it in even trifling operations, and it is now declared in high places to afford a safe and desirable means of relieving the pains of parturition. As might have been expected, an agent so potent as, by a breath, to rob the patient of his senses, sometimes was found to produce the most mischievous effects. Patients died under its use. The partisans of the new remedy told us that the "cases were not well selected;" that "the article was impure;" that, if properly employed, it was entirely safe. With regard to the selection of the cases, these writers said little, but commonly referred to their own experience, if they had chanced to be successful.

It seems to have become established that there is no rule in relation to the condition of the patient, or the purity of the article, by means of

which it can be employed with any degree of security. It seems to be fast settling down into the place of affording valuable assistance in emergencies, and during the performance of capital operations. That it is a very valuable remedy, as a soporific, when diffused in the atmosphere about the patient who suffers from dyspnoea, from asthma, or any other cause, when locally applied, or when occasionally administered by the stomach, the author has almost daily evidence. That it is safe in its immediate effects, or salutary in its after influence, when introduced into the lungs in such quantities as to produce insensibility, he does not believe. In view of the casualties that are frequently reported (less frequently as the article is becoming less used,) few physicians would be willing to breathe these agents themselves, in order to experiment upon their effects. The author has observed it produce the most strange hallucinations, which continued to occupy the mind and make upon it the impression of reality, long after sanity and health was restored. He has found no difficulty in believing in the possibility of the entire innocence of Beale, the imprisoned dentist, in Philadelphia; having seen cases of hallucination in his practice, far more remarkable and improbable.

Enough has been written of its *immediate* effects. It was noteworthy that, at the meeting of dentists held, not very long since, in this city, most declared their unwillingness to use it frequently; many of them furnished cases illustrative of the peculiar, strange, and fatal symptoms which sometimes followed its administration; but nowhere have I observed anything in relation to the *permanent influence* upon the constitution produced by the inhalation of anæsthetic agents, several cases having fallen under my observation, which has induced me to regard the whole danger as not entirely passed when the inhalation has been effected without exhibiting any phenomena indicating danger.

*Case 1.*—Mr. J. M., a gentleman, about 30 years of age, of good constitution, who ordinarily enjoyed good health, took *ether* to facilitate the extraction of a tooth. He is of a nervous temperament, light complexion, blue eyes, and light hair. The administration of the agent produced no unusual effect, except that a “choking feeling” was experienced just before the occurrence of complete insensibility. After recovery from the immediate effect, for several weeks, extreme nausea and constant pain in the head was experienced.

After the lapse of three or four months, Mr. M. applied to me for advice, complaining of the following train of symptoms, the commencement of which he dated from the day that he inhaled the ether. He is an intelligent man, and has no doubt that they are wholly attributable to the inhalation, and that they commenced at that time. These symptoms, he says, he never before experienced. Is very “bilious” (to use his own language); tongue much coated; constant pain in the head, especially over the eyes; a “feeling as if there was a want of mental exercise;” habitual costiveness; pain in the right side and back; indigestion, want of muscular strength; nervous system greatly deranged; neuralgic pains; and great despondency of mind.

Change of habits, mineral tonics and alteratives, restored him to perfect health after a few months. All these symptoms at length disappeared.

*Case 2.*—Mr. C. M. inhaled *chloroform* for the purpose of having a tooth extracted in November, 1854. In the afternoon of January 5,

1855, I was called hastily, found him in a state of dreadful nervous excitement. He had just recovered from a period of insensibility; his extremities were cool; pupils of the eyes natural; some heat about the head and neck; convulsive twitchings in the face; and trembling with nervous agitation and mental excitation.

When the urgent symptoms were relieved, I learned that he recovered from the immediate effects of the inhalation without any unusual symptom; that it was followed by a very unpleasant feeling in the top of the head, such as he had never experienced before; that this symptom and neuralgic pains had been constantly experienced from the day that he took the chloroform.

In the morning of January 6th, while lying reading on the sofa, he was seized with a singular sensation of bewilderment and other feelings that he finds no language to describe. These sensations greatly alarmed him. Recovering himself, he went to his father's warehouse, while there engaged, an hour or two afterwards, he again experienced those singular sensations, but found himself unable to *articulate distinctly*. His father perceiving that he was ill, observing convulsive twitching in his face, with palor and anxiety, and perceiving in his conduct a desire to go home, took his arm and walked with him to his residence, about half a mile distant. I was soon after summoned, and found him in the condition heretofore described.

I prescribed stimulants, antispasmodics, and alteratives. He did not leave his room for a week, during which he suffered from extreme restlessness, anxiety and nertigo. His pulse continued, during the week, depressed. I treated him with tonics and antispasmodics and mild mercurial alteratives with evident advansage; but his neuralgic symptoms yielded slowly. His liver was constantly torpid; lassitude, indecision, and depression of spirits were indicated in his conduct.

I advised a voyage to Europe. He sailed in May, and remained till September. He returned very much benefitted, but had the same furred tongue that was evident in the case previously referred to, with more or less habitual costiveness. These symptoms have yielded to the use of mild alteratives, and he seems now, after the lapse of fifteen months since its inhalation, to have recovered again his wonted strength and vigor.

In the case last alluded to, it required about eighteen months to rally from the influence of the ethereal inhalation. In the case to which I shall next refer, over two years was required to outlive the same train of symptoms, mostly neuralgic, which commenced from the day of the inhalation.

*Case 3.*—Mrs. W., about 25 years of age, dark complexion, dark eyes, dark hair, of sanguine temperament, none of the nervous. She had usually enjoyed good health, although not robust. She received *chloroform* at the hands of a dentist also. I was called a year afterwards to prescribe for a set of symptoms very much like those described in the cases before narrated; neuralgia and "strange feelings about the head," were the prominent symptoms described, with a general feeling of "malaise." I found, as in the other cases, a determined conviction that all these symptoms were new, and that they commenced with the inhalation. I treated her as I did the others, depending mainly upon *iron*; the appearance of the countenance indicated the want of a larger supply

of iron in the blood. She gradually regained her usual health. It required a full year, however, to accomplish the cure. The writer believes that the experience of others, if it could be accumulated, would prove that—

1. Chloroform is most dangerous when employed in cases of trifling importance, both in relation to its immediate effects and final results. This is proved by the greater frequency of cases in which unpleasant results are observed, which follow the extraction of teeth or its use in trifling operations, where there is not pain enough to resist its excessive effects.

2. That persons whose nervous systems are particularly susceptible are most liable to suffer from the inhalation of these agents.

3. That the use of chloroform in the lying-in chamber is not devoid of danger.

A very limited inquiry into the experience of others has been made with the following results. An eminent practitioner, in answer to my inquiry, says: "I have given it in four cases of accouchment. One of my patients had puerperal mania, and another congestion of the brain, both within six days afterwards. It is possible that chloroform was not the cause in either case, but I have never ventured to use it since. A lady of eminence in New Jersey, took chloroform in labor, became comatose, immediately recovered, with *permanently impaired* intellect. In the experience of a neighboring practitioner, a perfectly healthy girl aged 18, sanguine temperament—catamenia regular, applied to a dentist to have a tooth extracted under the influence of chloroform. It was done very carefully by a prudent man. A very few inspirations sufficed to produce insensibility. The tooth was extracted, but sensibility did not return for several days—a serious congestion of the brain followed, continuing for several weeks, and though several years have elapsed, she continues in a partially demented condition, subject to periods of excitement somewhat like those which she exhibited during the original attack.

A physician of New York City relates a case of a young woman aged 28, in good health, who, after the extraction of a tooth, was immediately seized with the most distressing symptoms. Every muscle in the body commenced jerking and twitching. These phenomena continued for four days, despite the means adopted for her relief. They ceased at length under the use of strychnine. I am not informed with regard to the influence upon the mind.

The same gentleman related the case of a young girl, in a good family, (without date, age, name or any facts lest the matter might become public, and grieve the friends,) who became crazed immediately after taking chloroform to facilitate the extraction of a tooth—*years have passed, and she is still a maniac.*

Another case has come to my knowledge of a child fourteen years old, who took chloroform when about to undergo a trifling operation; she became deranged; *six years have passed, and she has in nowise recovered.*

Morris County, N. J., furnishes a case, that I am not at liberty to report, in which permanent idiocy resulted from the inhalation of chloroform.

That these agents should be used with great caution, is further proved

from their influence upon certain susceptible constitutions, when not taken for the purpose of producing insensibility, but when merely exposed to an atmosphere charged with the fumes of ether or chloroform. On this point I have several illustrations, but one will suffice.

Mr. ———, a highly respectable dentist of ———, of nervous habit, light complexion, active motion, suffered from all the symptoms which were observable in the cases which I reported in my own experience in the early part of this article, simply from breathing the fumes of these anæsthetic agents as they permeated the apartments in which he operated and resided. He was accustomed to use these agents in his practice, almost hourly; his house was perpetually filled with the odor. He became, at length, feeble, pulseless, anemic—"felt as if he had been drinking champagne"—suffered from neuralgia, and very great nervous debility. Abandonment of business, a residence in the country for three years and constant out-door exercise, and the use of electricity, accomplished a cure at the end of that period. He has no doubt but his illness resulted from this cause, and that his recovery is due to its removal, and the remedies employed.

My honored and beloved preceptor, the late James C. Bliss, M. D., related a case to me, last Spring, in which amaurosis followed by idiocy, resulted from the use of chloroform or ether in parturition. They succeeded the inhalation so promptly that it is evidently proper thus to trace cause and effect. I understood that all who saw her, both in and out of the profession, attributed the amaurosis and the subsequent derangement to the inhalation of one of these agents; I did not understand which.

Several other cases have come to my notice, in which the inhalation of anæsthetics seemed to produce similar constitutional effects. They were not my own patients, and I could not get access to well-authenticated facts in relation to them.

These facts have made upon my own mind the impression that these agents should be regarded as remedies of great potency, and not always certain to produce none but salutary effects; that they should not, if possible, be administered to persons, subject to local determination, or where their antecedents offer reason to apprehend derangement; that their use should be avoided in persons of extremely nervous temperament, or for any cause of nervous susceptibility.

We have the authority of eminent men in Europe, and in this country, whose experience in the use of these agents has been very extensive, in favor of their usefulness and safety. Still these gentlemen have committed themselves in favor of what may be regarded as their hobby, without being chargeable with any want of respect, and the experience of others does not justify fully their opinions with regard to their entire safety.

If cases of dying do *sometimes* occur in the lying-in chamber, and on the operating tables—if debility, hepatic congestion, neuralgia, apoplexy, and mania, do *sometimes* follow their use—it would appear proper that he who would deserve a reputation for wisdom and discretion should be quite certain that the severity of the case demands a *somewhat hazardous* remedy. Chloroform furnishes most valuable assistance in the operations of surgery, and the lying-in chamber. With no disposition to undervalue it, and far less to treat lightly the valuable statistical evidence furnished by Professor Channing, of Boston, and Professor Simpson, of Edinburgh, of its comparative safety, when carefully employed, I cannot believe that

its employment to relieve the pangs of *ordinary confinement*, or to allay the pain of a trifling operation, is wise or expedient. If, in my comparatively limited experience, three cases should come under my observation within about two years, others, situated more advantageously, could note many such cases, if looked for. To record the result of my observations, and to prompt abler observers to look in the same direction, is the whole of my present purpose.

While writing the concluding pages of this article, I have been called to administer chloric ether in a case of amputation of the adventitious toe of each foot, from a young gentleman of vigorous health. Although the operation was not very protracted, and the ether was administered by a discreet medical assistant, derangement followed; nor were my anxieties entirely relieved with regard to these effects before the lapse of six or eight hours.

If the facts which I have collated are sustained by those of larger experience—if there are constitutional effects, as well as immediate, to be guarded against, more regard should be given to the habits of the patient, and these agents should surely be reserved for grave and trying emergencies.

That permanent ill effects should be produced by agents that cause insensibility or derangement, is to be expected by analogy, and by previous experience with regard to other agents which produced like phenomena. I have not access to the facts in the case, but, if I mistake not, the same kind of effects, both immediate and constitutional, were experienced in the case of Professor Fisk by passing a current of electricity through the diaphragm. If the reader has access to the facts he will find it a case in point.

In an early volume of the *Amer. Jour. of Science & Arts* is an account of the constitutional effect of the inhalation of the "Nitrous Oxide Gas." The subject of the experiment, immediately after taking the exhilarating gas, began to laugh immoderately, and laughed incessantly for years afterwards. It is furthermore related, if I remember correctly, that recovery never took place.

It is likely that we shall never discover a perfectly safe and harmless way of parting company with our senses, with the expectation that, after the object is accomplished, be it but the advance of science, or the relief of pain, we can be quite certain that reason and intellect, will promptly return.—*New York Journal of Medicine.*

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### *Female Medical Education.*

We have received, among a number of other announcements, the circular of the "Female Medical College of Pennsylvania," located in Philadelphia. It seems to us that a word of comment on the arguments advanced by the friends of similar institutions may not be amiss at the present time. The corporators of this Philadelphia institution make, in their circular, an appeal for an endowment; and put forth briefly their claims to the liberality of the public at large. It is their fashion to re-

gard their project as a "*cause*" that is an engine of modern progress. They commence their appeal thus: "The corporators of the Female Medical College of Pennsylvania appeal to the friends of humanity in behalf of this institution and the cause it represents. They regard the medical education of women as a necessity of the age, and a way-mark of the advancement of a refined civilization."

It would seem from this that humanity has been suffering for the want of petticoated physicians; that masculine talent is not suited to medical necessities. Female medical education is a "*necessity of the age*;" that public sentiment, which a century or two ago drove the female midwife from the practice of obstetrics, and substituted the female accoucheur, was not an advance, but a retrograde movement; and a "*refined civilization*" requires that we should go back to the practice of our ancestors. Refined civilization! that must indeed be refinement which would subject the tender nature of women to the hardening influences of a medical life, and crush out of her all those gentle impulses which make her what she is—make a business and trade of her sympathies, and place the knife of the surgeon in the soft hand which was wont only to soothe and comfort.

"They find the demand for female physicians wide-spread and increasing, and regard the study and practice of medicine as peculiarly adapted to the nice perceptions of women, and the tenderness and refined graces of her nature."

Do they? Then they find what in our blindness we have never discovered. To judge from the only female physician whose success we have had the opportunity of judging, we should opine that the demand was not so large as to be overwhelming. She came to this city three years ago, lived through by some mysterious process to us unknown, had no patients that we ever heard of, shut up her office and resorted to woman's natural occupation—looking up a husband—and, having succeeded in that, left the city.

But the "*nice perceptions*" of women so peculiarly adapt her to practice. The phrase is cunningly used. Women, perhaps, excel in perceptive faculties, but we have never known that they prospered especially in logic. A woman rarely stops to reason. It is a beautiful element in her character that she is impulsive, and learns all she ever knows of a subject at the first glance. This intuitive perception is a child-like element of character which produces sometimes really wonderful results, but something more than all that is necessary to the physician. Keen perceptions are too often linked with a timid nature, and the female physician, while she would often appreciate fully the danger of her patient, would lack in that fortitude, calm judgment, and indifference to the opinions of others, which are essential to success in practice. If there is any occupation which requires certain elements of character not usually coupled with the adjective *feminine*, such as prompt decision, physical endurance, disregard of personal comfort, courage, and coolness under excitement, it is the profession of medicine.

"The tenderness and refined graces of her nature" (woman's) will not be especially illustrated in assuming the duties of the accoucheur.

The forceps, the murderous perforator, and that blunt hook are neither tender, refined, nor graceful; and though we might respect the woman who could use them well and manfully, it would be the same very distant



respect which we cherish for an accomplished female tight-rope dancer. It is absurd to suppose a life passed among old sores, acrid discharges and unhealthy expectoration, to be suited to the gentle nature of woman. The hold which woman has upon male humanity is not founded in the possession on her part of the strong, heroic element; and so soon as we learn to look upon them as other than gentle and kindly, needing our protection, so soon do we destroy every element of that chivalry which has ever been woman's surest defence, and has done so much to humanize and soften the masculine character.

Change these relations, place the two sexes in competition, and the feebler is no longer the idol to which every worthy offering is brought, but simply a fellow-struggler in the world-wide game of "devil-take-the-hind-most." The woman who places herself in such a position is a fool.

"They consider that woman, as a wife and mother, pre-eminently *needs* a clear understanding of the functions of the human body and the means of preserving health; and that high-toned and intelligent female physicians, from their relations to their sex, must be most important instrumentalities in imparting such knowledge, where it is most needed and will do the most good."

This is true enough. Whether as wife and mother, or as school girl, woman does need to know that out-door air and exercise are a part of her proper "functions," and that cotton, whalebone, and curled-hair bosoms are poor substitutes for that natural rotundity of figure and softness of outline which form her chiefest charm, as evidence of her adaptation to the one greatest purpose of her being. Whether we must educate a bevy of female apostles of natural hygiene for this express purpose, is another question. We find no difficulty, either in our own constitutional bashfulness, or in the modesty of our feminine hearers, in preaching the gospel of nature with due earnestness and unction. Our success to be sure is indifferent, for fashion is a stronger argument than we can bring, but we fear the female preacher will suffer from the same difficulty.

"It is well known that there is a vast amount of suffering among women, which is left without relief from the shrinking delicacy of its victims, and it is therefore a demand of humanity that women should be put in possession of the requisite knowledge to administer the required treatment in such cases."

There is more suffering left unrelieved from ignorance on the part of the practitioner than any other cause. This "shrinking delicacy" is a myth. No sensible woman allows it to interfere with her health; and those who are not sensible can usually be brought to see the necessity for setting aside an artificial modesty, and doing what is fit and necessary to be done.

"They also desire a scientific medical education for woman, because it will furnish her honorable and profitable *employment*—giving her a new sphere of usefulness and happiness, where duty and the sympathies of her nature lead her: in the chambers of the sick and the suffering."

The motive is a good one; the means of carrying it out anything but good. In the progress of our civilization it has become evident that woman needs and is justly entitled to a larger compensation for the services she renders. We employ a needle-woman in an occupation requiring education, taste, judgment, and true perceptions of beauty in form and color, and pay her less for the day's labor than we give a ragged street urchin

for running an errand. It is wrong, but if one wish to degrade woman, let him exhibit her incompetence by placing her in the practice of a profession to which she is unsuited, as well by her best qualities as her poorest—her strength in her weakness.

Here we leave the subject. We have hardly touched the real argument, contenting ourselves with a concise reply to the appeal of the corporators. We sincerely trust that they will fail in procuring the \$50,000 which they ask to place themselves on a substantial basis. It would almost inevitably be one of the most mischievous expenditures conceivable. An endowment to enable women—to do what? To sit in dissecting rooms and cut up dead humanity, and to forget all that which makes them feminine. To watch, unmoved by any useless pity, the writhings of the victim of the surgical operation; to go out to the world prepared to do this thing themselves; to leave the gay world of dance, and song, and flowers, and dress, to which their nature adapts them, and in which they are beautiful, and devote themselves to the study of ulcerations and eruptions; to look with critical eye on scald-head and milk crust; to bleed, and blister, and purge, puncture abscesses, and split up carbuncles. Faugh! protect us from such women!—*Buffalo Med. Journ.—Am. Med. Gazette.*

## EDITORIAL AND MISCELLANEOUS.

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### TO SUBSCRIBERS.

We owe our friends an apology for the late appearance of the last number of the Journal; they will, however, readily excuse us, when we inform them that neither of the Editors could give any attention to it—one of them being on his way to Europe, and the other disqualified by sickness. Under these circumstances, the labors connected with the Journal were kindly assumed by an efficient friend, but one who was already overburdened with pressing duties.

Our object will be, hereafter, if possible, to get the number out promptly with the first of the month.

We have been very much gratified of late by public and private assurances, that our labors have not been in vain, and we here return our acknowledgments for the words of commendation and encouragement received from various quarters, and though we have no idea that we deserve the position that some are disposed to give us, we hope yet to be able to furnish a Journal that will be a fit recipient of the compliments which our friends have bestowed.

Our associate, (Prof. W. F. Westmoreland,) as we have already intimated, is now in Europe, and we shall soon expect some account of himself, or rather of what he finds interesting in medicine, across the water. This is his second visit within a few years, and being familiar with medical matters, especially in France, his observations will doubtless be entertaining and profitable.

We would request our contributors to forward their communications in time to reach us, by the first of each month, as it is important that our selections of original matter for the Journal of the succeeding month, should be made during the first week of the preceding. We must again trouble our correspondents with the request, that they will address all letters not immediately connected with the editorial department, to the Treasurer, Dr. J. G. Westmoreland; the Editors have

nothing to do with the business of the Journal, and prefer not receiving letters in reference to subscription, distribution to subscribers or advertising, but earnestly invite an extensive and heavy correspondence with collaborators.

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#### DEATH OF DR. G. M. SCARLETT.

It is with deep regret that we have to record the death of Dr. G. M. Scarlett, one of the graduates of the first session of the Atlanta Medical College; he died during the month of September, at the residence of his father, Glynn Co., Ga. We had the melancholy pleasure of seeing him a few days before his death, and shall not soon forget the gratification which our visit seemed to afford him; and the calmness and even cheerfulness with which he bore the distressing disease under which he labored.

We have rarely met with a more singular case of disease than we saw exhibited in the person of this interesting young gentleman.

After graduating here, he went to Savannah last winter with a view of prosecuting his medical studies, and while in attendance upon the lectures in the Savannah Medical College, he contracted (as we were informed) Pneumonia, which was followed by suppuration of the left lung—the abscess pointing and discharging externally through the parietes of the chest; the process of suppuration continued, and when we saw him, the pus was discharging from a second opening through the walls of the chest (the first having closed) the lung being almost entirely destroyed; some six or eight months having elapsed since the acute attack.

This is the first death among our Alumni that has come to our knowledge, and we hope that it may be long before it shall be our painful task to record the death of another.

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#### MENSTRUATION IN OLD AGE.

J. J. Dixon, M. D., Ashland, Tennessee, in a business letter, gives the following interesting item:

"In a few lines, I wish to record a brief account of a sin-

gular case to which I was this day called. The patient was an old lady, aged 67, who is now menstruating; she is the mother of eight children; her menses ceased nineteen years ago, since which time she has enjoyed respectable health. Menstruation returned eleven months since, and has now occurred, in all, six times. She has not suffered any serious difficulty until the present period, and her symptoms now seem to be only those usually attendant upon painful menstruation."

[We should be glad to receive from Dr. Dixon some further account of the progress of the case described in the above communication, as we should be strongly inclined to suspect *disease* of the uterus, and not a mere resumption of its lost physiological action.—EDITORS.]

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#### BIBLIOGRAPHICAL

We have had upon our table for some time, "The Causes and Curative Treatment of Sterility, with a Preliminary statement of the Physiology of Generation, with colored Lithographs and numerous wood cut illustrations, by Augustus K. Gardner, A. M., M. D., &c., &c.," published by De Witt & Davenport, 160 and 162 Naussau Street, New York, which doubtless contains much useful, if not *new* matter, and upon the whole, may be looked upon as rather a valuable book, though decidedly marred by looseness of style, and what we are inclined to consider, as a touch of obscenity.

The most objectionable feature, however, connected with the publication, is the minute detail of the contents of the work, in an advertisement in the New York Tribune (an extract from which we find in the Western Lancet) intended, of course, for the public eye, which we do not hesitate to pronounce not only decidedly quackish, but indecent; and for which we consider that the author should be held responsible; the sort of notoriety acquired for him by the character of the work, and the course pursued by his publishers, can hardly, we think, be considered very creditable.

"Clinical Lectures on the Diseases of Women and Children,

by Gunning S. Bedford, A. M., M. D., Professor of Obstetrics, the Diseases of Women and Children and Clinical Midwifery in the University of New York." Published by Samuel S. & Wm. Wood, 389 Broadway, New York. We have to return our thanks to the author for the *fourth* edition of the above work, the *first* appearance of which was only some sixteen months ago—upon the reception of the second edition, we expressed our high appreciation of the value of the work, and take great pleasure in commending this enlarged and revised edition of September, 1856. But few medical works have ever been so enthusiastically received as this of Prof. Bedford's.

"Human Physiology, Statical and Dynamical, or The Conditions and Course of the Life of Man, by John William Draper, M. D. L. L. D., Professor of Chemistry and Physiology in the University of New York, illustrated with nearly three hundred wood engravings, New York. Harper & Brothers Publishers, Franklin Square, 1856."

As acknowledged in the last number of our Journal, the above work has been received from the publishers, for which we can very sincerely return our thanks, not only for the courtesy, but for the valuable book thus put in our possession. We have been, for some time, expecting a work from this source, and are truly gratified that Prof. Draper has furnished us with an *American* work on Physiology, that will compare favorably with the production of any foreign author; even with the great work on this science, the "Principles of Human Physiology," by Carpenter.

The work before us professes to be the text of the Lectures on Physiology, which the author has given in the University of New York, and is divided into two branches, Statical and Dynamical Physiology, in relation to which he remarks that, "The expediency of this has been impressed upon his attention, by the necessity of conforming his course of lectures to the wants of a medical class; the physician is chiefly concerned with the conditions of life—the organic functions, as digestion, respiration, secretion, &c. The doctrines of development and the career of an organic form, are of less pressing interest. But it was very soon found that other advantages were derived from this subdivision, as might indeed have been expected, from its

conformity to the usages of writers on other branches of physical science, doubtless if such a separation be accepted by physiological authorities, it will tend to the more rapid progress of both portions of the subject, by imparting to each a more definite office."

The object of the author seems to have been to make a practical work, and to aid in the removal of the mysticism which has pervaded the science, and remarks, "Alone, of all the great departments of knowledge, Physiology still retains the metaphysical conceptions of the Middle Ages, from which Astronomy and Chemistry have made themselves free. To exorcise it from such nonentities as irritability, plastic power, vital force, is the duty of the rising generation of physicians—it is also their interest. Empiricism will never be banished from the practice of medicine until Physiology is made an exact science."

We fully concur with him in the view presented, that "to the medical profession, as matters now stand, nothing is of more importance than the dissemination of physiological knowledge. Empiricism could not flourish as it does if the structure and functions of the body of man were better understood. How many advantages would arise if the elements, of this science were made a part of general education in America. What branch of knowledge has intrinsically a better title thereto? Is it all to be wondered at, that every kind of medical imposture prospers in communities where almost every one believes that a man has one rib less than a woman, and even among persons pretending to education, scarcely one can be found who has a distinct idea of the size, shape and position of his own stomach?

Such a diffusion of physiological knowledge would not only tend to a repression of empiricism, but would also exert an effect in raising the standard of acquirement among medical men themselves. That a great revolution is impending in the practice of medicine, no one who is at all observant of the progress of science can doubt, the great physicians of the future will be the great physiologists. He who can best correct the imperfections of a machine, is he who best knows its structure and action.

Why is it, that from Astronomy, Chemistry, Mechanical

Engineering and such other subjects, empiricism has disappeared? Is it not because exact knowledge has taken the place of speculation and mysticism? The delusions of Astrology, Alchemy and Magic have been unable to maintain themselves against simple Truth. And so of the numerous medical impostures of our times, they will die out as an exact knowledge of the structure and functions of man prevails."

Without attempting any thing like a minute analysis of the work, which would, indeed, be a task of great labor, we have no hesitation in saying, that this is one of the most important additions that we have had to the list of American medical works.

We have also received "The History and Statistics of Ovariectomy and the circumstances under which the operation may be regarded as safe and expedient, being a Dissertation to which the prize of the Massachusetts Medical Society was awarded, May, 1856, by George H. Lyman, M. D.;" containing a synopsis and analysis of three hundred cases of operation for removal of diseased ovaria; some items of which we present. Of the three hundred cases, the operation was completed by the removal of the tumor in 208—the tumor could not be removed in 78—the tumor was partially removed in 10—the removal of the tumor is not mentioned in 4. In one case the result is not stated—of the remaining 299 operations 179 recovered, 120 died. Of the 208 cases in which the operation was completed, 118 recovered and 89 died. We have, then, 300 operations (we presume well authenticated) for the removal of ovarian disease, of which 119 were successful in the removal of the disease and the recovery of the patient.

In conclusion, we would commend it as a valuable monograph upon this subject; it contains 146 pages, and is printed by John Wilson & Son, 22 School street, Boston, through whom, we presume, it could be obtained.

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We would desire to call particular attention to the article of Dr. Austin Flint on the "Abnormal Condition of the Kidneys in Bright's Disease," and shall make no apology for thus occupying so much of our space, the importance and obscurity of the subject and the ability of the author, fully justifying it.



*A Chapter Omitted in most Treatises on General Pathology.*

[This is the title of a *feuilleton* in a recent number of the *Gazette Médicale*, which dwells so happily on some points bearing upon the reputation and success of the physician, that we have been induced to translate a portion of it. After a playful enumeration of the advantages to be derived from the clinique and the dead room, the paraphernalia of trumpets, tubes, acids, crucibles, lenses, &c., brought to bear on the diagnosis of disease, and portraying the confidence and heartlessness with which the practitioner brings them to the mechanical investigation and treatment of *disease*, quite forgetting that there is a *patient* to be treated also, and indicating the danger that in relying upon the revelations of these, one may be led to neglect questioning a much more important apparatus, the brain—he says :]

But after all, this is not the whole of medicine; science in books, amphitheatres, cliniques, is not true medicine, such as is demanded in the world, in the bosom of society, in the midst of the family. After long and difficult investigation, after scrutinizing facts at the bedside and in the dead room, there is something still higher, still more important and more directly useful; it is the application of all this knowledge so tediously acquired, it is the practical use of the art itself, the direct procedure of the practitioner.

Can any one suppose himself to have become a physician worthy of the name, merely because he has shown an undoubted aptitude for auscultation, percussion, palpation, the analysis of this or that chemical or physical phenomenon; because the use of the lens, or nitric and chlorrohydric acids is child's play to him, and he knows all their reactions? Alas, we have seen in practice manipulators who have passed for masters in all these fine things, who doubted about nothing, who saw the disease *oculorum acie acerrima*, who touched it *non dubitante manu*; but the patient, what became of him, in the hands of these bold explorers?

We must be impressed with the fact that the poor patient, besides flesh and bones, has also a heart, morally speaking—that he hears and strives to comprehend, that he is anxious, that he clings to life by strong attachments, and that our dealing with this living and sensitive being cannot be limited to the mechanical part of the art. It must be recollected that the patient is surrounded by a family which has the greatest interest in knowing what is transpiring, and what is to be expected, and whose solicitude finds in a word, a gesture, a nod of the physician's head, reasons for anxiety, for despair, or for a confidence which the issue does not always warrant.

Here are imperative duties to fulfil, and most important services to render. The man of feeling who is capable of seeing through the surface, who penetrates to the secret fibre, the actual seat of the passions, the spring which maintains the vital movements, the physician who comprehends the extent of his mission, does not limit himself to the material determination of the signs of the malady, and the prescription of the remedies most appropriate for the disease; he goes farther, and sustains the *morale* of the patient, controls him, and exercises over him that salutary influence which the *vir probus medendi peritus* knows how to exert on the mind of the sufferer seeking from him relief and cure.

Listen to Sydenham, who said "*Ægrorum nemo a me alias tractatus est, quam egomet tractari cuperem, si mihi ex iisdem morbis ægrotare contingeret.*" (I treat no patient otherwise than I myself should desire to be treated should I happen to labor under the same disease.) This great man, at the end of his career, was able justly to boast this of himself; we would that every physician should ponder this thought in his heart, and so identify himself with his patient, as to imagine that in treating him he is treating himself—always bearing in mind to have equal respect to the sensibility of the skin and the moral sensibility; to be equally solicitous to assuage physical pain and to administer consolation to the soul—that healing balm which entails blessings upon the hand which bestows it.

Penetrate to the deepest emotions of your patient, put yourself in his place, and see what is to be done. Learn to inspire confidence by the interest you manifest, by patient listening, by assiduous, earnest attendance, by the sympathy he will read in your eye and on your countenance; let him find you at the same time grave and affectionate; avoid with equal care the doleful airs of the fatalist and the frivolous levity and indifference of the sceptic; and, above all, be truthful, that is, say nothing that you do not think, though perhaps not all that you think. God has placed side by side, in the human heart, hope and fear; there is something inhuman, impious, in announcing to the sick what divine prescience has chosen to conceal from them; the physician should throw a favoring veil over the cruel necessity of announcing imminent death, and should take care that the poor incurable shall not have reason to say to him, "I shall apply to another physician; for you neither cure me, nor relieve me, nor console me."—*Boston Med. and Surg. Journal.*

From the Medical and Surgical Reporter.

*Editorial Correspondence.*

NEW YORK, September, 1856.

*Dull Times.*—MR. EDITOR: "Dull Times" is still the cry of the professional men, to the great gratification of the sovereign people of this city. Salubrity is indicated by the reduced figures of the weekly bills of mortality, and by the fact that the yellow fever, which still hovers upon our borders, and sends an occasional case within, has been unable thus far to make any impression whatever.

*Ship Ahoy!*—An exception to the general dearth of occupation, however, is to be found at Quarantine, where the health officer of the port holds supreme command over as large a fleet, probably, as swelled their sails under the eye of Nelson at Trafalgar. On any day during the past two months may have been seen at anchor in our lower bay, a crowd of argosies, laden with the wealth of southern climes, detained there by the fiat of a medical officer, to whose discretion is committed the lives of the teeming thousands of this metropolis. The office has this year been no sinecure, though his income it is said will amount to the fabulous sum of \$100,000. This is I think impossible, though the office is admitted to be the most lucrative one in the State, and can hardly be exceeded in the country. And it is right that it should be, for it is a post of exceeding great danger, and he who faithfully discharges its duties, does so to save the lives of thousands of people and millions of property, at the imminent daily risk of his own.

*Yellow Fever in and near Brooklyn.*—Our sister city of Brooklyn has not been so highly favored with health, as the yellow fever has found a pabulum there which it in vain sought for on this side the river, and it will doubtless find victims there until the appearance of frost. It is the extreme southern portion of that city only that is affected, though the district appears to extend beyond the limits of the city itself. Two physicians of New Utrecht have yielded up their lives in the performance of their duty in the epidemic; they were Dr. Dubois, and his partner, Dr. J. L. Crane, the latter leaving a wife and several children; and Dr. Bailey, an army surgeon stationed at Fort Hamilton, is down with it.

*Amputation at the Knee-Joint, &c., in New York Hospital.*—I was a spectator of a handsomely performed amputation at the knee-joint, one day this month, at the N. York Hospital, by Dr. Markoe. The operation was rendered necessary by a smashing of the leg of a man by a falling building; it was doubtful for several days whether he could survive the shock of the accident, but he rallied so far as to justify the operation, under the influence of ether—but his life succumbed in twenty-two hours afterwards.

Among the curious freaks of rail-car wheels is the case of a man now in the same institution, from whose leg, from about three inches below the knee, the entire skin has been stripped, without breaking a bone or wounding a muscle, though the fascia of the latter is fully exposed. It could not have been done more neatly in the dissecting-room. The flaying process extended over the entire heel also, as far as the sole of the foot. A consultation of the surgical staff resulted in the conclusion

that amputation would be necessary, as integumentary reparation is impossible when the entire circumference of the limb is denuded to so great an extent.

*Sir John Holland, and other matters.*—I observe in the daily press a notice of the arrival at Boston of Sir Sohn Holland, a distinguished English physician. He married a daughter of that famous wit, philosopher, editor, and divine, Sydney Smith. Since the visit to our shores of Marshall Hall, some two years ago, we have not been favored with the presence of any of our distinguished professional brethren of Europe, and it is rather remarkable that we have had so few of them at any time. Independent of the numbers of students and young physicians who visit Europe from this side the water, for the purpose of a prosecution of their studies abroad, we probably send on visits of pleasure to England and the Continent in one year, as many as have returned the compliment in the last ten or twenty years. To what can we attribute this contrast? It can hardly be the superior pecuniary ability of American physicians, which enables them to enjoy the pleasures of travel to so much greater extent, for England and the continent doubtless exchange with each other abundantly in this respect. We certainly have natural attractions sufficient to allure the medical savans of Europe from their confinement to the routine of practice, to a "ventilation" and expansion of their brains and bodies. Why then are we thus forsaken by them? Can you explain the phenomenon? I am loth to believe that the gross ignorance of our physical and political grandeur, which has been heretofore chargeable upon the politicians and the masses of their people, but which is now fast giving way to the light of the reality, still shrouds the medical profession of Europe. Yet it may be, and if so, we can but hope that their eyes may soon be opened, and that seeing the beauty and strength of their young competitor for the glories of science, and the improvement of humanity, they may come to acknowledge us as we think we deserve, and by affording us the gratification of a more abundant personal intercourse, receive from us in return a renewal of their youth and strength. I trust the day is not far distant when at our national reunions, it will be found necessary to reserve seats for distinguished guests from abroad.

Respectfully yours,

J. GOTHAM, Jr., M. D.

# A T L A N T A

## Medical and Surgical Journal.

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DECEMBER, 1856.

[No. 4.

### ORIGINAL COMMUNICATIONS.

#### ARTICLE I.

*Homœopathy.* By ROBERT E. CAMPBELL, M. D., Benton,  
Lowndes County, Alabama.

Quackery is one of the social evils ; indeed, in a free government, it is an inalienable right. Attack Quacks and they will turn it to their pecuniary interests—they will cry out *persecution*. Homœopathy is the most *decent* if not the most *rational* system of quackery now extant, and if it were carried out it would fulfil one of the golden rules of Therapeutics—*do no harm* ; or, as Moses hath it, “*Thou shalt not kill*”—though in a violent disease requiring active medication, infinitesimals would surely *do no good*. Homœopathy will have its day, and it ought to be encouraged in the hope that it may displace many worse systems. It was Burke who said of the beautiful : “it must be small without angles ;” (Query :—Did he refer to Homœopathic globules ?)

In the following pages we wish it to be clearly understood that it is not our purpose to convince Homœopathic doctors, male or female, of their errors. We confess ourselves unequal to such a task, and as Homœopathy cannot be brought down to *terra firma*, we must permit these animated cabbages to march unrestricted over their gossamer parade ground. Controversies which have their seat beyond the limits of known existence, are not to be decided by human instrumentality.

We will not weary our readers with unnecessary refutation of Homœopathic dogmas. They are self-evident absurdities, and we might as well occupy time

“ —to prove by force  
Of argument that man's no horse,”

as to show their folly. Every one of them is positively contradicted, both by reason and fact, and none of them are sustained by one-hundredth part of the evidence which proclaims Joe Smith a prophet.

But the practical absurdity of Homœopathy, in the matter of doses, is worth some consideration, because to some of our readers it may be novel, and because, to us all, it forms an illustration of human credulity, perhaps more forcible than any other which can be presented from the modern history of man.

A ray of reason seems to have flashed across the mind of Hahnemann, when he resolved that a *theory*, in which there was not a particle of sense, should beget a *practice* in which there was not a particle of physic. It may possibly have occurred to him that men who could admit his dogmas, were not in a proper condition of mind to be trusted with drugs. Be this as it may, he promulgated the extraordinary doctrine that *the potency of medicine is in proportion to the exiguity of the dose ; and that diseases are only successfully combated by infinitesimal atoms of medicine, which possess the power to induce in healthy persons diseases similar to those for which they are antidotes ;* the latter proposition serving the purpose of obviating the natural objection to the first, drawn from every-day observation of the power of drugs, inasmuch as it removed the ground of observation from observable phenomena to conjectural effects.

Nothing can be more probable than that Hahnemann was himself a skeptic in the powers of medicine, and considered his system what it really is, an abandonment of diseases to the unaided curative efforts of nature. The queer theory which he invented must be regarded in the light of a myth, in which a supposed truth not likely to be received by the vulgar, is so wrapped up in acceptable obscurity and pompous foolery, as to gain practical currency.

Few of our readers, probably, have any idea of the insane extent to which the doctrine of multiplying the power by dividing the dose of medicine, is carried by the Homœopaths.

The patients of these pretenders, naturally influenced by old associations, look upon the little pillets, solemnly administered to them, with the awe which the presence of power inspires. Their imagination is wonderfully strict, by the Lilliputian embodiment of Titanic forces, and they put forth the trembling hand to receive the potent pillule with much the same feeling with which one handles percussion powder, or the hair-trigger of a rifle. It is impossible to persuade these people that they are imposed upon by their old habits of thought, and that homœopathic pharmacy is not a refined process of concentration, but a gross method of dilution. Many persons refuse to believe the statements made, with regard to the mode of preparation of homœopathic doses; but upon this subject there can be no doubt or dispute. Homœopaths openly avow, and publish their plan of pharmacy, funny as it is, and the uncheated community may fully enjoy the development without any misgiving as to their honest title to mirth.

The homœopaths assert that, "in order to obtain the full power of a drug, it must be reduced to an *infinitesimal atom*." Now, an "infinitesimal" is necessarily an indefinite and indefinable thing; it passes the power of conception; it is less than any assignable quantity. In preparing such' a dose, a difficulty, if not impossibility, must be overcome. We must be satisfied with an approximation to it; but this approximation Hahnemann has cleverly achieved. In order to prepare a pillule, a grain of any ordinary substance, sulphur, silex or mercury, is rubbed up with ninety-nine grains of sugar of milk. Out of this mass a single grain is taken, and subjected to a second admixture, and so on to the requisite dilution. If the substance to be diluted be a fluid instead of a grain, a drop of any of our ordinary tinctures is taken, and mixed with ninety-nine drops of water—from this a drop is taken and mixed with another ninety-nine drops, and so on. The thirtieth dilution is frequently employed; and to administer their doses, pills of the sugar of milk are moistened with a drop of the ultimate preparation and there *dried!!!* The patient may, according to directions, *swallow*, or *smell* their *doses*. By this ingenious process, an ordinary drug, which, as a whole grain, has no visible power, according to homœopathy, becomes a tremendous potency to the "immaterial principle."

Hahnemann says, that the most appropriate dose is the thirtieth dilution—which consists of a decillionth of a grain or drop. Dr. Simpson endeavors to illustrate the subject thus: “There are, upon the earth, some 900,000,000 human beings. If all these had been called into being when Adam was created, some 6,000 years ago, and had lived up to the present time, and each of these 900,000,000 individuals had, when first called into existence, began to swallow, and continued to swallow up to the present hour, without rest or cessation, night and day, a decillionth dose of a grain, they would not yet have finished a single grain of the medicine. Nay, if each of these 900,000,000 men, now 6,000 years old, had swallowed, during every moment of their past existence, not a single globule but *one million* of globules of Hahnemann’s thirtieth dilution, they would not yet have finished a single grain, and would not finish it, working constantly, at the same rate, for millions of centuries to come.”

A great number of similar illustrations might be quoted, but the above will be enough to give our readers as much information in homœopathic mensuration and arithmetic, as their minds will be capable of receiving at once. We will now barely hint to them, that after mastering the profound nothingness of the thirtieth dilution, they may extend their calculations to the six thousandth, which, we are gravely assured, is good for consumption. To obtain an idea of this infinitesimality, we may suppose it to represent the amount of common sense to be extracted from a universal space full of homœopaths, or the quantum of modesty, resident in Hahnemann. It is a flight of folly, which far distances common arithmetic, and leaves, exhausted logarithms panting in the rear.

It is certain that homœopaths give no medicine at all. If matter be infinitely invisible, it cannot be infinitely divided. To effect this there must not only be susceptibility of division, but instruments to effect it. Grains of sugar may penetrate and divide bodies of certain bulk, there is no reason to believe they can do this to bodies infinitely small, nor that globules of water can continue *ad infinitum* to dissolve other fluids. A pestle and mortar would be gross instruments wherewith to operate upon millionth and billionth particles. Compared



with such exiguities, the fissures in our smoothest mortars would be mammoth caves. But the whole thing is supremely absurd and needs no refutation.

Yet, how comes it, say the homœopaths, that our little pills cannot be swallowed with impunity, as has been frequently proven to the sorrow of sufferers, who have bolted a hundred of them in derision? It is well known that many persons practicing homœopathy, fill their vials with concentrated medicines. Arsenic, morphine, aconite, &c., are their ordinary prescriptions. Such men are simply *scoundrels*. They are sacrificing both health and life, under the pretence of administering what ought to be innocent pilloids. They are not homœopaths in theory or practice, but living on false pretences.

It is somewhat strange how their numerous Apothecary shops and pharmacies are supported. Certainly, the sale of homœopathic physic could not furnish occupation for one Apothecary to the world, for a single grain of medicine would be sufficient to medicate mankind through all eternity.

The queer conceit that medicines are specifically curative of diseases, the like of which they generate, is worthy of some notice, as another instance of the power of dogmatism to control the understanding. The assumption is without any support from fact, much less based upon ordinary observation. Every one is aware, that in many instances, opium lulls pain, but no one administers it because it produces pain. Castor oil excites the sluggish peristaltic action of the alimentary canal, yet, does it follow that, upon the healthy subject, it acts as an astringent? Ipecacuanna vomits the sick, and, also the well. Many more instances, might here be adduced, but the foregoing will suffice to show the absurdity.

In the instances of "*similia similibus curantur*," adduced by Hahnemann, are startling exhibitions of the superficial quality of his mind, and of his natural proneness to sophistical conclusions. He formed, it seems, his exposition of medicinal agencies from the proverb, "a hair of the dog that bit you;" but he has failed to comprehend the philosophy of it. And, upon the mere *ipse dixit* of this imprudent man, we are asked to destroy all that the human mind has accumulated concerning the power of drugs; to surrender our splendid *materia medica*, with all its oft-tried stores; to abandon all the results.

of observation on the nature, progress, and treatment of disease, and to trust for relief from suffering and premature death, to infinitesimal dilutions. Great numbers of persons, called educated, comply with this demand. Even the Czar of Russia permitted himself to be made a fool of by a homœopath—doubtless, never having given the subject a moment's consideration. The Emperor of all the Russias was permitted to die with as little scientific aid as an Australian savage.

[TO BE CONTINUED.]

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## ARTICLE II.

*Diseases of Atlanta, Georgia.* By J. G. WESTMORELAND, M. D.

Prior to the first of May, 1858, the time I came to Atlanta, there had been, for two years or more, a prevailing epidemic of Typhoid fever. During its prevalence I occasionally visited the place, and from my observation no unusual malignancy seemed to be manifested in the Fever. Although the subjects of its attack were numerous, much less mortality attended it than is sometimes found.

This was the more to be wondered at, since at that time those causes which generally induce malignancy in epidemic diseases of any kind, were to be found in abundance here. It is notorious that the rapid settlement of any place, where numerous improvements are going on at the same time, by which the forest-growth is destroyed, and the surface of the earth disturbed extensively, is a fruitful source of disease. This might have favored the appearance and extensive ravages of the epidemic, but did not seem in this disease to add to its violence.

The sufferers from other diseases, in many instances, were not so fortunate.

Measles, which about this time, prevailed also extensively, was attended with unusually violent symptoms. Obstinate, and often uncontrollable Diarrhœa, coming on as the sequelæ, or as a complication in the disease, was the cause of considerable mortality during the warm season. In some instances Dysenteric symptoms would be the first to show disturbance

of the bowels, but would usually give place to those of malignant Diarrhæa. From the information derived from some practitioners, the former name would be more appropriate, yet doubtless the inflammation of the mucous surface of the bowels was more extensive than is found in ordinary Dysentery.

In fact, since my observation of disease in Atlanta, and from the report of others even before, there has not been an epidemic of Malignant Dysentery in the city at any time. It is true, I have witnessed a number of mild cases occurring in the same neighborhood at the same time, but they differed materially from those usually termed epidemic. They were generally controlled readily by the ordinary means.

The city has rarely been exempt from Measles from that time to the present; but has usually been accompanied with less fatal local inflammatory derangement. Bronchial inflammation, extending sometimes to the parenchyma is the common difficulty, and rarely proves fatal. Varicella occasionally makes its appearance, and during the Small-pox panic last Spring, both it and Measles were occasionally mistaken for Variola.

These mistakes occurred, of course, with those out of the profession; but to gratify the propensity which some have, in a high degree, to be the first to tell alarming news, there were those who would circulate these false reports as coming from a physician, greatly to the disturbance of the citizens.

Following Measles came Roseola; and a peculiarity in disease I had never witnessed before was manifested. All those who had been affected were particularly subject to the eruption. So much so, that I do not recollect a single instance of the latter which had not been the subject of the former. This secondary eruption occurred often several months after the attack of Measles.

Scarlatina, in the malignant and milder forms, has been found occurring sporadically most of the time for the last three years. Cases frequently occur simultaneously in remote parts of the city from each other, and in some instances, attack only one in a family or even in the neighborhood. Occasionally one of these isolated cases proves to be of the most malignant character, running its course rapidly to a fatal termination. At no period since my residence in the city have I

known the disease to prevail extensively, nor to spread from those affected, as if by contagion. A remarkable instance of the attack of Rubeola and Scarlatina, in the same individual, was observed last spring by a physician of this place. It seems, from the history of the case, that the subject, a boy eight or ten years old, had been exposed to the contagion of Measles, and a few days afterwards, perhaps only two or three, he was attacked with Scarlet fever, which ran the usual course of Scarlatina Anginosa, and while convalescent the eruption of Measles made its appearance with the usual symptoms of that disease. I was kindly invited by the attending physician to witness this anomalous succession of diseases, and found the fading eruption of Rubeola with the usually accompanying cough, from bronchial irritation, while the marks of counter-irritation produced by the treatment for inflamed tonsils in the former disease were still visible. I did not examine the patient while either form of the eruption was distinct, but learned from his physician that they exhibited all the distinctive features of the two diseases.

Remittent and Intermittent Fevers do not occur very frequently, yet considering the absence of those causes which commonly produce Malarious Fever, it is surprising that the disease should be found at all. It is true that perhaps half the cases that are met with here, are contracted in malarious districts; at the same time there are those that receive this unknown subtle poison in the locality. I have seen cases in the heart of the city, on White-Hall Street, the subjects of which had not been out of town for months. I have also seen several cases near each other, on the skirts of the city, in the neighborhood of a small marshy branch imperfectly drained. These cases were few and of a very mild character, proving as well by the symptoms as by the topography of the vicinity, that the effluvia was limited in quantity as well as in virulence. Typhoid fever, though occurring only occasionally and in milder form since the epidemic of 1851-2, is still in existence amongst us; and that individual is peculiarly unfortunate, who contracts this disease in the midst of cases of Remittent Fever. Not that the diseases themselves have any controlling influence, one over the other, but that where Remittent Fever is the prevailing disease, there is great danger of mistaking Typhoid

fever for it, when the latter is met with. An error of this kind may cost the sick man his life. There is no generally recognized pathognomonic symptom of Typhoid Fever; and the usually observed symptoms may be so nearly the same, that the practitioner may be easily deceived, especially when the prevailing disease is of the remittent character. Let this error be counted by the physician, and let the abortive treatment usually applied to Remittent Fever be adopted and persisted in, and the tenure of the patient's earthly existence will be of short duration. We want some symptom by which we can determine the existence of this Fever within the first two or three days of the disease. That symptom we have.—Though not generally recognized, it nevertheless exists. The evidences of Typhoid Fever, are pain in the region of the medulla oblongata, tenderness on pressure just below the occiput, in the depression opposite the first cervical vertebra posteriorly, and pressure opposite the same vertebra laterally, alternately with the thumb and finger placed on opposite sides, so as to communicate a gentle motion to the bone together with absence of lumbar and dorsal pain and tenderness. I can see no good reason why locality can have any influence upon the disease, yet it has occurred in my practice less frequently here than elsewhere.

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### ARTICLE III.

#### *Severe Headache from Carious Teeth.*

DRS. LOGAN & WESTMORELAND—When I commenced practice, I, like all other young men, was anxious to get any opportunity to bring myself into notice. This was in the spring of 1852, in Hickman county, Tennessee. It was with me, as with others, all the afflicted were anxious to see the new doctor.

Benjamin Chandler asked me to examine him, rather from curiosity than otherwise, as he had been a standing case for two or three years, and all the medical skill of the country had been exhausted on him, without relief. Age, about forty-five, of temperate habits, was the father of a large family, and had

labored on the farm till lately—has suffered for two or three years from a constant, and very severe frontal neuralgia, or headache—has been bled and blistered, purged and puked; besides, the entire routine of tonics, without benefit.

Upon examination, I found his teeth in a very carious condition, but they seldom ached. I immediately concluded that this was the lesion. After some hesitation, he submitted his case to me, exacting the promise, that I should charge him nothing if he received no benefit at my hands. I immediately extracted fifteen teeth and fangs of teeth, and then put him on the use of quinine and tonics, with counter irritation to the forehead and temples. Recovery was slow but sure, and in about twelve months, he was entirely well. I charged him no fee, which was, perhaps, unprofessional; but this put me into business, and after this, I was *the Doctor*.

In cases of hemicrania and frontal neuralgia, I invariably examine the teeth, and if I find them carious, I advise extraction, and this seldom fails to cure; and I have had several of my own teeth extracted on this account, followed by entire relief.

You shall know the sequel of my case of abnormal menstruation.

Yours, truly,

J. S. DIXON.

*Near Ashland, Tennessee.*

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#### ARTICLE IV.

*Case of Fever.* By THOS. S. DENNY, M. D., Atlanta, Ga.

The great interest evinced in the subject before our last meeting, induces me to present a statement of the following case of Fever. I am desirous that each member of the Profession should form his own opinion of the nature of the Fever; my own is, that it was originally a case of Catarrhal Fever, having a very strong tendency to the Typhoid type. The patient is of a delicate constitution, about — years of age, and never had any sickness before, except slight attacks of Catarrh. His constitution is lymphatic—predisposed to phthi-

sis pulmonalis—male parent died of it. He resided in what I consider an unhealthy location, in the neighborhood of one of the filthiest branches in the city.

I was called on Saturday, 6th September last, at dark; found patient with very dry and hot skin, pulse, 85, dry and short cough; very slight uneasiness in chest, and no pain in any other part of the body; tongue furred, white. Prescribed pulv. ipecac, c. grs. x. hyd. prot. chlod. gr. i.

7th, 8½, A. M.—Symptoms much the same as yesterday. Repeat pulv. and the following mixture, syr. scillæ, tinct. op., camph., and vin. antim.

8th.—Repeat pulv. and continue mixture.

9th.—Fever very hot all night; abated this morning. Ordered sulph. quinine, 3 gr. doses, and hyd. prot. chlorid. gr. i. to each dose: one every two or three hours. Continue mixt.

10th.—Fever much diminished yesterday; after quinine, repeat pulv.

11th. Fever increased at evening. Continue quinine and mixture.

12th.—Fever much diminished; continue quinine and mixture. Patient very sleepless last night; ½ gr. acet. morph. at bed-time.

13th.—Morph. produced very happy effects; slept well and feels much better—no fever—continue quinine and morph.

14th.—Very much improved; discontinue quinine; give morphine at bed-time.

15th.—Improving; bowels have, all along, been disposed to be natural—rather inactive to-day—ordered charcoal, ʒij. in milk, as aperient, and ½ gr. morph. at bed-time.

16th.—Tongue, which has been all along coated, white at first, then brownish, now begins to clear. Morph. ½ gr.

17th.—Patient sitting up; feels stronger; tongue cleaning. Morphine, ½ gr.

18th.—Patient slept until 2 o'clock this morning, without morph. ; skin rather warmer than yesterday; appetite increasing; morph., 1-10 gr.

19th.—Slept until 8 o'clock, with morph., ½ gr.; skin perfectly natural; tongue, ditto. Nothing but debility remaining; morph., 1-10 grain.

20th.—Morphine, 1-10 grain.

22d.—Attempted to sleep without powder last night, and woke three times in cold perspiration, and had pains over the body. Pulv. ipecac, c. and cal., gr. ii. in pulv. no. ii.

23d.—Same.

24th.—Repeat pulv. ; relieved.

25th.—Omit calomel.

26th.—Pulv.

27th.— do.

30th.—Nit. mur. acid, ʒj. gtt. x *ter in die*.

The patient continued to improve, but for imprudences in diet, and unnecessary exposure, and is now at his usual avocations. Several nights the patient's mind wandered considerably, but he was perfectly rational during the day.



## SELECTIONS.

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*Annual Address of the President of the Illinois State Medical Society  
read at the Annual Meeting in Vandalia, June 4th, 1856. By N. S.  
DAVIS, M. D.*

*Gentlemen of the Society :—*By no means the least difficult part of my task, in preparing for the present occasion, has been the selection of proper subject for our mutual consideration. Those miscellaneous topics relating to the education and ethics of our profession have constituted the theme of so many introductory and anniversary discourses, that they have lost all their novelty, if not their interest. On the other hand, I fear the full consideration of any particular disease would involve details alike tedious and inappropriate. A brief review of the present position of medical science, the tendencies of prevailing medical opinions, the special topics needing further investigation, and the best methods of conducting inquiries in relation thereto, would each and all constitute the subject of a discourse highly appropriate for an occasion like the present; but the proper consideration of such a theme requires far more time than has been at my command. I shall, therefore, relinquish these, and humbly invite your attention to the discussion of a single question, but on which, I trust, will not be devoid of either scientific interest or practical value. The question to which I refer, may be stated as follows, viz: What influence are Alcoholic Liquids capable of exerting, either in preventing or curing tubercular disease of the lungs?

Whether we regard tubercular phthisis in its character as the opprobrium of the healing art, or as the universal scourge of Christendom, giving rise, annually, to more than one-tenth of the whole number of deaths that occur, it is, in either aspect, a subject worthy of the most rigid and persevering investigation. On the other hand, the relations which alcoholic liquors bear to the great social and moral interests of human society, invest every proposed application of them, even in the treatment of disease, with a peculiar interest and importance. There is, perhaps, no disease in the whole catalogue which better illustrates the mutations of medical opinions and the influence of popular theories on medical practice than tubercular phthisis. At one time, it is regarded as the direct result of the sudden atmospheric changes which occur in all countries north of the tropics; and, to counteract its progress, the patients were carefully confined in heated rooms, and treated with tar, naphtha, and various medicated vapors. Next came the doctrine, that tubercular disease was simply the result of repeated congestions, and a slow inflammation of the pulmonary tissue; and the exhaustion of the patients was rendered more rapid by repeated small bleedings, blisters, tartar emetic sores, setons, antimonials, low diet, and sometimes mercurials; and when they could bear these no longer, a change of climate relieved the Doctor, if not the patient.

But, within the last twenty years, as you are well aware, all this has been reversed. There are very few, at the present time, who regard tubercular deposits in the lungs as the product either of inflammation or of the congestions consequent upon ordinary atmospheric vicissitudes. On the contrary, they are almost universally attributed to some defect in the processes of assimilation and nutrition, arising either from hereditary predisposition, or from causes which depress the vital forces and render the organic actions defective. And even the few who still claim the agency of congestion or inflammation in the generation of tubercular deposits, attribute these primary morbid conditions to debility or depression of the vital forces. Thus, Dr. Henry Goadby, of Detroit, in a recent article on Tuberculosis, says: "It invariably happens, in patients having a tendency to this disease, that the *vital powers are depressed* and the circulation feeble—the heart, in fact, has not sufficient power to propel the blood throughout the capillary plexuses which eminently distinguish the tissues the subjects of this disease."

Again, Dr. Theophilus Thompson, physician to the Hospital for Consumption and Diseases of the Chest, in London, when speaking of the *modus operandi* of the causes that favor the development of tubercles, says: "The unfavorable influences noticed in this lecture may be regarded as producing their effect, first, by *deteriorating the blood*; secondly, by occasioning congestion in the lungs." No sooner had this doctrine of debility, degeneration of the blood, and defective nutrition received the assent of the profession, than the old custom of resorting to warm air, depletive, and counter-irritation was abandoned, and various measures adopted, all having for their object the improvement of the strength and nutrition of the patients. At first cautious exercise in the open air by riding, a more nutritious diet, alterant tonics, such as iodine with bitter infusions, and anodynes to allay cough and irritability, were resorted to. But, seeing the almost uniform deficiency of fatty tissue in the consumptive, even in the incipient stages of the disease, and the extreme emaciation of the later periods, it was natural to infer that the radical defect in the nutritive processes was owing either to a deficient assimilation of fatty matter, or to an inordinate action of oxygen on the carbonaceous matter of the blood and tissues. Under the guidance of either of these ideas, with the medical mind thoroughly imbued with the chemico-physiological doctrines of Liebig in relation to the separate and specific offices filled by the two great classes of aliment, namely, the *nitrogenous* and non-nitrogenous or hydro-carbonaceous, it was to have been expected that the chief agents for counteracting the development and progress of tubercular disease, would be sought for in the latter class. Hence, we soon had added to the list of remedial agents, not only an ordinarily nourishing diet and free exercise in the open air, but also the use of cod-liver oil, cocoa-nut oil, fusil oil, and fat meats *ad libitum*. With all those patients whose digestive organs were capable of receiving and assimilating these oleaginous substances, they proved more or less beneficial, by lessening the rapidity of waste or emaciation and sustaining the strength; and, hence, the cod-liver oil quickly obtained a popularity and extent of use rarely equalled by any other remedy. Unfortunately, however, a large proportion of patients were soon nauseated by its use, and the profession were compelled to seek from the class of hydro-carbonaceous substances some substitute more palatable and yet calculated to fulfil the theoretical idea

of neutralizing the action of oxygen on the tissues. For this purpose the various liquors, having alcohol as their active constituent, being at once palatable and ranked by Liebig and others as the most efficient and active of the whole class of hydro-carbonaceous substances, were readily chosen. At first, they were given cautiously and chiefly as vehicles to cover the taste and lessen the nauseous qualities of the oils; but, during the last year or two, they have been rapidly assuming a predominance and popularity which should at once challenge the closest scrutiny of the profession. So true is this, that free, nay severe, exercise in the open air, plenty of beef-steak, and wine and brandy *ad libitum*, constitute the popular prescription for the consumption of the present day, and that too by medical men of high reputation.

That I may not be accused of exaggeration, I will quote part of an article from the editor of the *Buffalo Medical and Surgical Journal*, as follows:

"The contrast between the two ideas of treatment is a marked one. The venesection, the emetic, the blister, the iodine inhalations, the careful protection from air and from exertion, the abstinence from animal food and from stimulating drinks, incident to our former ideas, have given place to active exercise, to fat meats, and hearty diet, to vinous and alcoholic stimulants, and to what would once have been deemed reckless exposure to vicissitudes of weather.

"'I've been bleeding from the lungs since I saw you!' said a medical friend as he entered our office, and in reply to our inquiry as to what he had done for it, he answered coolly, *drinking whisky punch!* He followed up this pleasant remedy in moderation, and, so far as we know, has had no return of his attack."

After alluding to one or two other cases in the same general terms, the writer adds:

"We could multiply cases. Even in those far advanced in the disease, we have *never failed* to witness more or less improvement as the result of this regimen. If it is the most promising of cure to the curable patient, it is also the most conducive to comfort in the incurable. We do not intend to discuss the pathology of the disease, or the rationale of the treatment in this hasty sketch; we wish only to declare our full conviction of the merits of the tonic treatment."

The article from which we have just quoted, was first published in the April number of the *Buffalo Journal*, and it has already been either copied, or alluded to approvingly, by a large portion of the medical journals of this country. It is true that some of them qualify their approval of the remedy by a word of caution in regard to the moral effect of a general recommendation of alcoholic beverages in any disease. Thus, the May number of the *St. Louis Medical and Surgical Journal* contains the following:

"*Alcoholic Treatment of Tuberculosis*.:—The able editor of the *Buffalo Medical Journal* bears testimony to the beneficial effect of alcoholic liquors in the treatment of phthisis. We fully agree with him that the most successful treatment will be found to be the alcoholic, combined with nourishing diet, including cod-liver oil and the like, and constant, and even violent exercise in the open air. But there is a serious moral objection to this treatment, which is worthy of consideration. *It does tend to make drunkards, and perpetuate the vice of intemperance.* The

physician who cures his patient of consumption, only to precipitate him into a drunkard's grave, has surely done him anything but a favor. What we mean to say is this, that so dangerous a remedy as alcohol should be recommended with very great caution, even in cases in which it is clearly beneficial."

Having made the physiological effects of alcohol, on the various functions of the human system, a special subject of study and experiment for several years past, and seeing clearly the tendency of medical opinion in favor of its use in the treatment of tuberculosis, I have, during the last twelve months, made a careful record of all the observations which have come within my reach, in relation to its influence both as a prophylactic and a curative agent for this disease. There are two distinct, but equally legitimate, methods of determining the value of any remedial agent. The first is purely philosophical, or inductive, and requires, on the part of the physician, an accurate knowledge of the nature and tendencies of the disease, together with an equally reliable knowledge of the natural or physiological effects of the proposed remedy. With such knowledge to constitute his premises, he may very confidently deduce conclusions concerning the effects of the agent, when applied to the prevention or cure of the disease. The second method is wholly empirical or experimental, consisting in the direct observation of the effects which follow the administration of any medicinal agent, without reference to any previous knowledge of the physiological relations of the agent. When both these methods of investigation are employed in relation to the same subject, and the results obtained mutually corroborate each other, the evidence or knowledge afforded is scarcely less certain than though it had been obtained by a mathematical demonstration. In further pursuing the question under discussion, I shall employ both the methods just named: the first briefly, but the latter more in detail.

In entering upon the first, two questions are presented for solution as the basis of all the subsequent steps, viz :

*First.* What are those conditions of the human system which constitute pulmonary consumption or a predisposition thereto ; or, in other words, What is the true pathology of tuberculosis ?

*Second.* What are the actual changes in the fluids and solids, or the properties and functions of the human system, produced by alcoholic liquors ?

By a critical examination of the facts and opinions contained in our medical literature, we may reduce the answer to our first inquiry to the following propositions, viz : Tuberculosis essentially consists in the formation and deposit of a partially-organized matter, which affords, by chemical analysis, most of the proximate and ultimate constituents of the healthy structures, and, under the microscope, is seen to consist of cells, many of which are imperfect, nuclei, and an amorphous granular substance ; all of which seems to possess a strong tendency to further degeneration and the ultimate formation of pus. The conditions favorable to the development of the tubercular matter, are, either such a defect, hereditary or acquired, in the primary organization of the individual, that the processes of assimilation and nutrition are incapable of elaborating all the primary cell formations in that perfection necessary to fit them for constituting healthy structures ; or a similar defect in the process of disintegration, by which the cells and fibrin, once constituting healthy tissue, are

returned into the blood so imperfectly disorganized as to be incapable of excretion, and hence accumulate until they find a lodgement in some of the tissues. With either of these pre-dispositions, or rather defects, the place where and the time when the deposit will commence, and the rapidity of its increase, will depend much on accompanying circumstances. If the primary defect is in the assimilative process, and it be strongly manifested in early life, the more vascular structures, directly connected with that process, will become the local seat of disease, and we shall have the ordinary scrofulous enlargement of the lymphatic and mesenteric glands. On the other hand, if the defect be slight, or chiefly in the process of disintegration, and especially if it is not developed until the middle or later periods of life, the deposit will be by far the most frequent in the lungs; owing, no doubt, to their extreme vascularity—their liability to frequent congestions—and their being the seat of one of the most important excretory functions of the whole system. Such is a concise statement of the most enlightened views at present entertained in regard to the nature and development of tubercular disease, whether located in the lungs or elsewhere. So far as they are correct, it is evident that whatever tends to invigorate the system, improve the tone of the organized structures, and render the process of assimilation more perfect, on the one hand; and, on the other, whatever tends to aid the free oxygen in disintegrating and more perfectly excreting the matter of the tissues as they become effete or useless, tends directly to prevent or arrest the process of tuberculosis.

Hence, whatever may be the diversity of views in regard to other matters, all at the present day agree that pure air, free muscular exercise, a nutritious diet, and a cheerful frame of mind, are the best prophylactics, if not curative agents, in phthisis; while confined and impure air, insufficient or indigestible food, sedentary habits, and depressing mental emotions, as certainly favor the development of the disease and hasten its fatal termination.

Our next step is to inquire concerning the effects of alcohol upon the blood, and, through it, upon the assimilative and depurative processes of the system, that we may see clearly its therapeutic relations, not only to phthisis, but to all other diseases.

There may be those who will regard a serious inquiry into the *modus operandi* of an agent, so long and so generally used as alcohol, entirely superfluous, it having long since been fixed, both in the popular and professional mind, as one of the most efficient stimulants and supporters of the temperature of the system which we possess. Whatever truth there may be in the old maxim, *Vox populi, Vox Dei*, when applied to politics, it requires but little research to show the entire fallacy of the *vox populi* when applied to questions of science or medical philosophy. If we drop those popular notions and theories which we have unconsciously imbibed with our education and intercourse with society, and subject alcohol to the same experimental tests as are required to determine the effects of other agents, we shall be much more likely to arrive at reliable results. Such experimental tests have been applied at various times, and by some of the most eminent investigators of the present day, and the results have been so uniform as to leave no doubt in regard to their correctness.

When alcohol is administered in moderate quantities, one of its first and most prominent effects, (that indeed which chiefly attracts the at-

tention of the community,) is a peculiar exhilaration of the brain and nervous system, coupled with a weakness or unsteadiness in the actions of the voluntary muscles.

While in this state, however, other effects, of far more physiological importance, are taking place in the blood and the elementary functions of the system. The usual proportion of carbonic acid gas fails to be thrown off in the expired air, as shown by the experiments of Drs. Prout, Bouchardet, myself, and others.\* Carbon, consequently, accumulates in the blood, diminishing the change from venous to arterial hue in the lungs, and directly diminishing all the organic and secretory actions of the system. As further and more demonstrative proof of the latter part of this assertion, it has been shown by recent experiments, that, when alcoholic drinks are taken even in moderate quantities, the aggregate amount of all the excretions from the body are less, in a given time, than when no alcohol is present in the system. Another proof of the same diminution of organic change, both nutritive and secretory, was developed by my own experiments, began in 1850, and repeated at various times since,† by which it was shown, that the diminished excretion of carbonic acid from the lungs, under the influence of alcoholic liquors, was accompanied and followed by a positive diminution of the temperature of the body. Again, when death has been produced, either in animals or men, by an overdose of alcohol, the blood is not only found of a dark, venous color in the arteries as well as veins, but the coagulability of its fibrin is also impaired. I shall not trespass on your patience to inquire here, whether these effects of alcohol on the blood, and the functions of respiration, secretion, and animal heat, are owing to the direct affinity of the carbon and hydrogen of the alcohol for the free oxygen of the blood, by which the latter is prevented from exerting its proper influence in the processes of nutrition, disintegration, and excretion; or whether they are owing to the direct antiseptic qualities of the alcohol, by which it tends to arrest all change in organic matter, whether living or dead; a brief statement of the effects alone being all that the limits and objects of this address will permit.

In answering the inquiry, what are the effects of alcohol on the human system, all my experiments and observations lead to the following conclusions, viz:

1st. The presence of alcohol in the blood produces a temporary exhilaration or excitement of the nerve structures.

2d. It diminishes the excretion of carbonic acid from the lungs; diminishes the change of color from venous to arterial blood; and diminishes generally the organic changes in the system.

3d. It depresses the temperature of the body, and lessens the tone of the muscular structures.

If these conclusions are correct, (and it would afford me great pleasure to give the facts and experiments in detail from which they are deduced, were it possible within the limits proper for an address,) every member can see clearly the relations which they bear to the acknowledged conditions accompanying the development and progress of phthisis.

\* See Thompson's *Annals of Philosophy*, Vol. 11.; also, Carpenter's *Human Physiology*, p. 306.

† See *North-Western Med. and Surg. Journal*, 1851; also Address on Alcoholic Liquors, &c., Feb., 1855.

It is easy to perceive that the presence of alcoholic liquids in the system can neither promote healthy nutrition, nor facilitate the processes of disintegration and excretion, and, therefore, that there is no rational or inductive indication for their use, either for the prevention or cure of consumption. The idea advanced by Dr. Goadby, in the article already referred to, namely, that the immediate cause of pulmonary tubercles is the inability of the heart to circulate the blood freely through the intricate plexuses of the pulmonary capillaries, affords still less indication for the use of brandy or any other alcoholic liquid. For there is no fact in physiology better established than, that whatever lessens the change from venous to arterial blood in the lungs, or tends to accumulate effete carbon in the blood, directly lessens the facility with which that fluid flows through the capillaries of those organs. And yet it has been an hundred times demonstrated by direct experiment, that alcohol, whether in the form of distilled or fermented liquors, produces speedily, and in a marked degree, precisely this effect on the blood. So marked indeed is this effect, that, in some of my experiments, the air exhaled from the lungs one hour after three or four ounces of brandy had been taken into the stomach, contained more than twenty-five per cent. less than the normal proportion of carbonic acid gas. And whoever will observe the purple lips, the bloated and leaden face, the slow and almost stertorous breathing of full intoxication, will see abundant proof of the impeded circulation through the pulmonary capillaries. Still, Dr. Goadby, and many others recommend the use of brandy and wine "to increase the *energy* and *power*" of the heart, and *invigorate* the system. We fear that they, like the multitude of non-professional men, have mistaken the exhilarating effects of these fluids on the brain and mind for a true increase of organic vigor and energy. Certain it is, that they have not furnished us with a single experimental or demonstrative fact in proof of their position. Some of my audience may be ready to ask, if I would deny the almost universal sentiment of mankind, by claiming the broad ground that alcoholic liquors are neither tonic, invigorating, or supporting to the human system? I answer, unhesitatingly, Yes! and base my answer not merely on the deductions of the most careful and varied experimental researches, but ask, in return, What there is in the tottering and unsteady step, the impaired digestion, the frequent functional derangements of the kidneys, exhibited in a greater or less degree by all habitual drinkers, which is indicative of increased physical strength, vigor, or power of endurance? But I must hasten to the last department of my task, in which I shall confine myself exclusively to the results of clinical experience.

About one year since, my attention was directed to this branch of the subject, and I searched diligently the pages of our medical literature for some record of observed facts in relation to the use of alcoholic liquids in the treatment of tubercular disease; but I sought in vain. There were many expressions of *opinion* in the same general phraseology as that already quoted from the *Buffalo Journal*. It was undoubtedly true, that the editor's friend had "been bleeding at the lungs"—that he had drunk *whiskey punch*—and that he had no return of the attack, so far as he (the editor) knew. But, of what possible value is such a statement? It neither informs us when the bleeding occurred, how much punch he drank, *how long* he had remained exempt from the bleeding, or what else he had done besides drinking whiskey punch during the same time. It is only a

few weeks since a young man came to me with extensive tubercular deposits in his lungs. He had never had any hemorrhage from the lungs, but his physician advised him to go South, live on hearty food, and drink pretty freely of brandy every day. He did so, and in less than six weeks he was taken with copious bleeding from the lungs. Now, if I should gravely set forth this case, as proof that brandy produced hemorrhage from the lungs, it would be precisely of the same value as the statement about the *whiskey punch*. An eminent teacher of surgery is in the habit of relating the case of a young man whom he supposed to be far advanced in consumption, but who went into the country, exercised freely, almost recklessly, in riding, hunting, fishing, &c. ; lived on beef-steak and brandy, and returned home in apparent good health. But a writer in one of our south-western journals, relates another case equally advanced in disease, who also went into the country, endured the same reckless exposure, lived on nutritious food, and recovered equally good health, but without having used a drop of brandy or any other alcoholic liquid. I mention these merely as examples of what constitutes far too great a share of the practical part of our medical literature. *Post hoc, ergo propter hoc*, furnishes the only basis for far too large a proportion of our practical conclusions.

During the past twelve months, I have kept a careful record of all the well-marked cases of tubercular consumption which have come under my own observation. I have taken special care to ascertain both the present and preceding habits in regard to the use of alcoholic drinks in each individual case. The whole number of cases, so observed and recorded, is 37 ; of whom 10 were natives of the United States, 24 of Ireland, 1 of England, 1 of France, and 1 of Germany. Of the whole number, 26 were males and 11 females. Of the whole number only 6 were tee-totalers, or such as wholly abstain from the use of intoxicating liquors. Of the remaining 31, six drank alcoholic liquors only occasionally or at irregular intervals ; while the remaining 25 drank either distilled or fermented liquors almost every day, until pulmonary disease had made such progress that they were compelled to desist, either from want of means to buy it with, or from its positively aggravating the disease under which they were laboring ; and six of the number had been, one or more years, what the world calls *habitual drunkards*. If we had taken the utmost care to select cases for the purpose of demonstrating experimentally, whether alcohol possessed any power to control the progress of tubercular development, by its continued use through a series of years, we could not have made the experiments more satisfactory than some of the cases embraced in this record. We select the two following in relation to, the use of beer :

*Case 1*—Mrs. D——, an Irishwoman, aged 21 years ; has been in America two years ; has been married eighteen months, and has one child, six months old. For two years before she came to America, she had been employed as a servant-girl in an English family ; had been supplied with nutritious food, and a liberal allowance of beer, which she drank regularly and freely every day during the whole time.

After her arrival in this country, she continued to drink beer and occasionally other liquors, but neither so much nor so regularly as before. She began to have some cough before she sailed for this country, which has steadily increased, with all the accompanying symptoms of phthisis,



until the present time. At present she is extremely emaciated, pulse rapid and feeble, exhausting night-sweats, copious purulent expectoration, with all the physical signs of extensive tubercular cavities in the upper lobe of both lungs. She says none of her immediate family are, or have been, consumptive, but she thinks one uncle died with that disease. About three weeks after the foregoing record was made the patient died.

*Case 2*—Mr. B.—, a native of Ireland, aged 22 years; is clerk in a liquor store, or, in other words, a “bar-tender;” has been kept much within doors for more than two years; no proof of very direct hereditary pre-disposition, though some of his relatives have died from phthisis. He says he has drank regularly every day from three to six glasses of beer, during the whole of the last two years, and occasionally a glass of other liquor. He began to cough about six months since, and has continued to do so, accompanied by steadily-increasing emaciation, and all the ordinary symptoms of consumption.

He has now purulent expectoration mixed with tubercular matter, pulse from 90 to 110 per minute, frequent night sweats, and impaired digestion. The chest is flattened, especially beneath the left clavicle; dull on percussion over the same region, the respiratory murmur prolonged and cavernous, accompanied by a crackling and sub-crepitant roushus, while the voice furnishes distinct broncophony. There can be no doubt but the upper lobes of the lungs are filled with a copious tubercular deposit, at present in the second stage of advancement, or that of rapid softening.

In these two cases it will be observed that the use of beer was commenced, in one, eighteen months, and the other, two years before any active symptoms of tuberculosis were known to exist. And, though the drink was taken regularly, and for the most part at meal-time; it seemed to exert not even a retarding influence over the development of the disease.

In regard to the use of distilled spirits, some of the cases present still more striking experiments, but we will quote from our memorandum-book only the two following:

*Case 3*—Mr. M.—, a native of Ireland, but a resident in this country for fifteen years, aged 35 years; of medium size, dark hair, and apparently a well-developed frame.

Says he does not know of any cases of consumption in his own family, or among his more direct ancestors. He has been a country hotel-keeper during the last twelve or fifteen years, during all of which time, he has drunk more or less alcoholic drinks, generally distilled spirits, almost every day, but not to the extent of producing intoxication. His wife died during the summer of 1854, and, for the succeeding eight or nine months, he drank liquor more freely, and continued to do so until the following spring, when he first began to be troubled with cough and symptoms of pulmonary disease. After the symptoms of disease had made considerable progress, he says he was compelled to forego the further use of stimulating drinks, on account of their “making him worse.”

Now, (Dec. 1855,) he is much emaciated, has copious and exhausting night-sweats, lips pale and thin, cheeks sunken, pulse 80 per minute in the morning and very feeble, in the evening, 120 per minute; appetite much impaired, bowels regular, cough frequent and cavernous, expectoration copious and purulent, with a distressing sense of suffocation at times. There is much depression of the infra-clavicular regions, but

more of the right than the left. Over the same regions there is dulness on percussion, the respiration cavernous with gurgling rhoncus, and the voice affording plain pectorillogy—in other words, there were large tubercular cavities in the upper lobes of both lungs. This patient died in about ten days after the foregoing record was made.

*Case 4*—Michael —, aged 38 years; native of Ireland, but lived in this country several years; by occupation, a laborer; accustomed to constant out-door work, and the use of hearty food; does not know that there is any hereditary tendency in his family to tubercular disease. Says he has drank all kinds of alcoholic liquors freely, but especially whisky, almost daily for the last fifteen years, and continued to do so, until his present disease had made such progress that he was compelled to desist. He commenced coughing about eight months since, but continued to work pretty steadily until the last two months. At present he presents every symptom and sign, rational and physical, of extensive tubercular disease of the lungs in the last stage of its advancement, as plainly as those detailed in Case 3. He died in the Mercy Hospital, about one week after he came under my observation.

Several other cases might be selected from the above list, strikingly illustrating the inefficiency of all the varieties of alcoholic drinks, either for preventing or curing consumption; but I have given enough to show that, whether they are viewed in the aggregate or in detail, they afford no evidence in favor of the therapeutic value of alcoholic drinks in the treatment of tuberculosis. If you ask how I account for the prevalent, popular and professional opinions in their favor, I answer, in three ways.

*First*, these opinions are based, with many, exclusively on the delusive idea, still very prevalent, that these liquors are actually tonic or invigorating to the human system under ordinary circumstances. They say, consumption is a disease of debility—alcoholic liquors are tonics—therefore, alcoholic liquors are beneficial in that disease. Like a recent writer in the *Westminster Review*, they reason *logically*. To prove that alcohol was food, he said “food is force”—“alcohol is force”—“therefore, alcohol is food.”

Both employ syllogisms, but both forget to prove their premises; and both forget that we might, with just as good logic, say that food is force—steam is force—therefore, steam is food.

*Second*. The influence of alcohol in exhilarating the brain, in many cases, lessens, for a time, the extreme sensitiveness which accompanies some cases of consumption, renders the patient more tranquil, and thereby produces an apparent temporary advantage. Another influence of alcohol which I have described, namely, its tendency to diminish the organic actions and excretory functions of the system, enables it in some cases of phthisis, characterized by rapid emaciation, to check that process, and, in some instances, to give an apparent increase of nutrition by retaining more of the fatty matter in the system. But, in every case that has come under my observation, this apparent benefit has been only temporary, the apparent increase of nutrition unhealthy, and the patients in the end sink more rapidly than ordinary cases. In one instance of this kind, a *post-mortem* revealed extensive uncitrized cavities in the lungs, extensive fatty deposits in the liver, and slight fatty degeneration of the muscular structure of the heart. Some have claimed that alcohol, by diminishing the process of disintegration and waste, performed an office equivalent to

the taking of more food. If this were true, opium would be much more efficient food than alcohol ; and we should only require some agent capable of arresting disintegration altogether, to enable us to live perpetually without the inconvenience of paying board-bills.

*Third.* The greatest cause of error, in estimating the effects of alcohol on the consumptive, is the universal custom of recommending, along with the alcoholic drinks, a thorough change of habits, active exercise, nutritious food, and often a change of climate ; and, then, making no distinction between the effects of the alcohol and the accompanying circumstances. All know, that, in many cases of chronic disease, if we give the patient bread-pills, and exact the proper exercise, diet, &c., they get well. They, of course, are willing to swear that the pills cured them : and, I much fear, that, in reference to alcoholic drinks, many physicians not only deceive themselves but their patients also. Two years since, I knew a gentleman of our city who found himself, in the autumn, reduced to a very feeble condition in advanced phthisis. He had been closely shut up by Homœopaths for two months ; had hectic, night-sweats, purulent expectoration, and well-formed cavities : one lung. Being called upon for advice, I told him he had an incurable disease, but if he wished to prolong life, he must ride out every day, take plain, easily-digestible, and nutritious food, and, for medicine, cod-liver oil and the cold infusion of wild cherry bark. He followed my advice. At first he had to be carried to his carriage ; but he soon gained sufficient strength to get in and out alone. He continued to ride through all the cold of winter, did a good business in buying pork for packing, but sunk and died during the first warm weather of spring. A *post-mortem* revealed simply extensive tubercular deposits and cavities in both lungs.

Now, if I had prescribed for that patient, a glass of brandy or wine every day, and it had not positively prevented the favorable results, the latter would, most certainly, have been ascribed in a great measure to it. But he took not a single glass.

The great leading object of this address, is, to arrest the attention of the profession, and to entreat its members to adopt more rigid and careful modes of investigation ; at least to avoid giving currency to those loose, general statements which can only deceive the sick, and sometimes give encouragement to habits which may plunge thousands of the well into irretrievable ruin. If I accomplish this, I shall feel amply repaid for all the labor bestowed.

*On Neuralgia ; with the Report of two Cases of Excision of the Nerve.*  
By JOHN A. LIDELL, M. D., Demonstrator of Anatomy to College of Physicians and Surgeons, New York ; Surgeon to Bellevue Hospital, etc.

Operations for the relief of neuralgia are perhaps not sufficiently esteemed by surgeons at the present day. "Experience," says Miller, "has proved, that the relief, if any, obtained by such operations, is but partial and temporary, and the neuromatous enlargements, which form on

the truncated extremities of the nerve, are likely to produce ultimate aggravation. The operation, in truth, may be the means of converting an example of neuralgia, unconnected with structural change in any part of the nerve, into a worse form, dependent on structural change, not only considerable, but probably irremediable. Sometimes the operation has proved successful upon the nerve, only to drive the neuralgia to another—perhaps inaccessible.” Grant that such untoward results have followed both the simple division and the removal of a portion of the affected nerve. But do they *always* succeed these operations? Do they stand to each other *constantly* in the relation of cause and effect? Most certainly they do not, for it has happened many times that agonizing sufferers have derived both complete and permanent relief from their pains by the aid of a surgeon’s knife, after all other means had entirely failed. In these cases, no one can doubt that operative interference is not only justifiable, but demanded by humane considerations. The simple division and even the removal of portions of nerves affected by neuralgia are, therefore, operations which should not be ignored by the surgeon, whose duty it is to treat the more aggravated and unmanageable forms of this distressing complaint.

Since experience has proved that the surgeon’s knife cannot relieve all cases of neuralgia, the question naturally arises, to what class of cases the knife is applicable, or, in other words, what are the indications for operative interference. This question has been fitly answered by Mr. Erichsen, for he says that an operation “can only be of service when the pain is peripheral, occasioned by some local irritation existing between the part cut and the terminal branches of the nerve.”

Apropos to this statement is the case related by Mr. Abernethy, of a lady who suffered from a neuralgia affecting the parts about the inner edge of the nail of the ring finger of the left hand. In course of time, the pain “extended all up the nerves of the arm,” and, after eleven years of suffering, a cure was effected by cutting down upon, and removing a portion of, “the nerve of the finger from which all this disorder seemed to originate.”

Mr. Lawrence, also, in a case of neuralgia resulting from a wound of the finger, excised a portion of the nerve “with permanent success.” And Sir Astley Cooper completely cured a patient having “severe pain in the thumb, extending up the arm to the neck, and causing a distortion of the neck, fits,” etc., by cutting down upon the radial nerve by the side of the flexor carpi radialis longus, and excising about five-eighths of an inch of it.

It will be observed that, in all these cases, the nerve was excised between the seat of irritation and the nervous centre; that the object of the operation was to break the line of communication between the painful part and the sentient being. This lesson from experience is in perfect accordance with the teachings of physiology, and furnishes, I apprehend, an important fact for the guidance of the operative surgeon. If the nerve can be excised between the seat of irritation and the nervous centre, so that an impression cannot be conveyed from the affected part to the sensorium, then will an operation be attended with success, and a cheering prospect may be held out to the suffering patient.

But, unfortunately, an operation cannot always be performed under these favorable conditions. Unfortunately the local mischief productive

of the neuralgia may exist in the brain itself; in the track of the nerve, before its exit from the cranium; in the foramen through which it escapes, and even in remote parts of the body. In all such cases the knife cannot afford any rational prospect of cure, and, in the lighter forms of the disease, may even be productive of mischief. A curious fact may, however, be mentioned in this connection. It sometimes happens in cases where the nerve is not accessible between the seat of irritation and the nervous centre, that excision performed exterior to the seat of irritation affords relief, extending through weeks and even months. Might not the operation of excision be applicable to an extreme case of *tic douloureux* of this character, and of long standing, all other means of relief having failed? Might it not be justifiable and even humane to afford the patient this chance of temporary respite from suffering?

I have been led to make these reflections by a very severe case of *tic douloureux*, which first came under my notice about the 20th of September, 1854. The patient, a woman, was in the medical division of Bellevue Hospital, under charge of Dr. George T. Elliot, one of the physicians to that charity, who kindly invited me to see her in consultation. She appeared to be about the middle period of life, pale, and emaciated. Her countenance was distorted with the severest suffering which ever came under my observation. Her mouth was drawn somewhat to the right side, and the muscles of that side of the face were twitching spasmodically. She was rubbing her cheek, just anterior to the ear, very diligently with cold water for the purpose of obtaining relief. In a few minutes the paroxysms passed away, but she had scarcely commenced to reply to my questions when it returned with great intensity. After a little while she succeeded in informing me that the pain, intense, "almost driving her crazy," and cutting in its character, always commenced in the right side of the lower lip, a little above the mental foramen, shot along the canal of the lower jaw to the front of the ear, and radiated somewhat over the right side of her head above the ear. The lower lip was considerably swollen, more, however, on the right than on the left side of the median line, and on its inner or mucous surface of the same side there was an aphthous ulcer. She did not suffer any pain in the parts supplied by the ophthalmic and superior maxillary branches of the fifth nerve. The pain was paroxysmal, lasting from ten to fifteen minutes, and occurring after intervals of five or ten minutes, thus presenting the characteristic symptoms of *tic douloureux* in its worst form. She could not masticate any solid food, and even the act of swallowing or speaking would often induce a paroxysm. She got no rest by day and but little sleep at night, even with the aid of powerful anodynes. She had been admitted to the hospital on the fifth of September, fifteen days before I saw her, having dysentery, of which she was now cured. She did not come to hospital to get treatment for neuralgia, for she long before had deemed that incurable.

*Case 1.*—Her name was Margaret B., æt. 34 years, by occupation a housekeeper; married; and was born in New York. She dates her sufferings back fifteen years, when she was nineteen years old. Then, at the beginning of winter, she was suddenly and without apparent cause attacked with pains of a most excruciating character, which commenced in the lower lip, involved the whole course of the lower jaw of the right side, internal ear, and right side of head including right half of forehead.

No other part supplied with nerves by the ophthalmic branch of fifth pair, appeared to be the seat of pain, nor was any part supplied with the superior maxillary nerve involved. These pains were intermittent and recurred at intervals of fifteen or twenty minutes. Their intensity continued unabated for the three subsequent months, when they began to decline and gradually disappeared. The patient accounts for this departure of her neuralgia, by the occurrence of pregnancy, for in all her pregnancies, nine in number, she has observed, that, between the first and second month, the facial pains have begun to subside, and by the eighth month have entirely disappeared. Then, she always has remained free from neuralgia till from three to six weeks after confinement, when the pains have returned with all their original intensity.

In this way she suffered on through a period of about ten years, trying a great variety of remedies but without any benefit. At the end of this time, she succeeded in obtaining relief while under the care of a medical gentleman in New Orleans. The molar teeth (all sound) of the lower jaw of the affected side were extracted, but without any benefit. After that the supra orbital nerves were excised, together with branches of the portio dura going to the cheek from the parotid gland. The wounds were not allowed to heal for two or three weeks. Immediately after the operation she was salivated and then kept under the influence of mercury for four or five weeks. The pains continued with unabated severity for three weeks, when they began to subside, and at the end of two months entirely disappeared. This remission lasted two entire years. Thus relief was first brought to her by the operative surgeon, after ten years of useless trial of other means.

She was again attacked with the tic, about three years ago, while on a sea-voyage from New Orleans to New York, about three weeks after the birth of a still-born child. A great variety of remedies were again administered by different physicians, but without benefit, and she confessed to the taking of various patent nostrums recommended for nervous troubles. Failing to obtain relief from any source, she despaired of cure at the time of admission to the Hospital.

After careful examination it seemed to me clearly, that the nerve involved in the neuralgia was the inferior maxillary branch of the fifth pair, and that the seat of irritation producing the mischief was somewhere in the inferior dental branch, either in the filaments distributed to the lower lip, or in the canal of the jaw. I was led to this conclusion by the fact that *the pains always commenced in the lower lip and darted backwards along the course of the inferior dental nerve*, and then radiated over the side of the head. It occurred to me that an operation would be likely to benefit the patient, and that the removal of a portion of the inferior dental nerve from the canal of the lower jaw, afforded the best chance of success. I gave this opinion, in which Dr. Elliot coincided and he kindly transferred the patient to the division under my charge for surgical treatment. My colleagues unanimously sanctioned the proposition, and accordingly, on the 9th of October, 1854, the patient being under chloroform, I proceeded to operate, assisted by my friends Drs. Cane and Elliot, and in the presence of the House-Staff and other medical gentlemen.

An incision through the integuments was commenced about three quarters of an inch in front of the lobe of the right ear, and carried parallel

to the ramus down to the base of the jaw a little in front of the angle, then continued forward along the base till the facial artery and vein were crossed, then carried upward parallel to the first incision, terminating below the track of Steno's duct. The facial artery and vein were exposed, tied, and then divided so as to save effusion of blood. The anterior portion of the parotid gland was turned back, the original incision continued inward through the masseter muscle, and the anterior portion of the insertion of that muscle separated from the jaw. The tongue of flesh, thus formed with the knife, was raised, exposing the jaw over a considerable part of the inferior dental canal. The cavity of the mouth was not opened. A trephine of small size was then applied to the level surface of the jaw laid bare by the previous detachment of the masseter muscle, a button of bone removed, and the interior of the jaw exposed. The trephine was again applied a little in front of this spot and another button of bone taken out. In this way the inferior dental nerve was laid bare to the extent of fully one inch. It was then removed, and the spongy interior structure of the jaw scooped out along with it. This last step was executed for the purpose of obliterating completely that portion of the inferior dental canal, and for the further reason that a new bony formation would be likely to prevent a reunion of the excised nerve. A probe was then thrust into the dental canal and pushed as far as the mental foramen with a view to crush and destroy, as completely as possible, what remained of the nerve. The operation was now complete. The bleeding was easily stanchcd, the soft parts were brought into a proper position and secured by three points of interrupted suture and narrow strips of adhesive plaster. Cloths wet with cold water were ordered to be applied, and morphine in full doses internally. The patient suffered so much from the effects of chloroform that she did not fully recover her senses for two days. Her sufferings did not abate much for some time after the operation, although the pains were essentially altered in character. She could not open her mouth or laugh or smile, or move the muscles of that side of the face in any way without disturbing the wound, and suffering much from the soreness thereof. The pains continued very severe for a fortnight, and then gradually abated. In four weeks she was able to partake of solid food, (which she had not done for over a year) and was entirely free from pain in the face and head. She had become so much emaciated and weakened by the severity and long duration of her sufferings, that some time was required to completely re-establish her health. The only untoward occurrence during convalescence, was an attack of facial erysipelas, which was readily managed by the local use of lead and opium wash, and the internal administration of the infusion of rhubarb and soda, together with tonics. On leaving the hospital, the patient was particularly requested to report to us immediately if her neuralgia should return, as we were anxious to be informed with regard to the result of the case. About six months after the operation she came to the hospital of her own accord, to report that she continued free from suffering. And one year after the operation I met her in a railroad car when she appeared to be in perfect health, since which time I have neither seen nor heard from her. The presumption is that she is still well, although about two years have elapsed since the operation.

*Case 2.—Tic Douloureux of eight years standing—Removal of a portion of the superior maxillary nerve from the infra orbital canal, etc.—*

Martin M., æt. 29 years, born in Ireland, by occupation a carpenter and joiner, was admitted to Bellevue Hospital on the 19th day of September, 1856, for a very severe tic douloureux. He informed us that his family were not predisposed to any disease, and that no member of it had had neuralgia. He was attacked very suddenly about eight years ago, directly after shaving off his whiskers, and he attributes his difficulty to "catching cold in his face." He had intense lancinating pains, commencing generally in the right side of the nose or thereabouts, and shooting back along the track of the superior maxillary branch of the fifth nerve. Occasionally the pain began in right forehead. These pains occurred in paroxysms which lasted five or ten minutes, and recurred at short intervals. They were excruciating, and almost insufferable in character. Up to this time, his health had been good, and his habits strictly temperate. All the usual and many of the unusual remedies for tic douloureux, were administered to the patient by different physicians, but without any benefit. About five years ago, or in other words, about three years after his attack, a long incision through the scalp above the right ear was made by a distinguished western surgeon, but without affording any relief whatever. All the upper teeth on the right side have been extracted, but with the same result. About one year ago, (seven years after attack), he placed himself under my care. He was suffering very severely, having paroxysms every ten or fifteen minutes, which lasted five minutes. The paroxysms generally commenced with acute pains, beginning at a spot about midway between the right side of the nose and the infra-orbital foramen, and shooting back along the infra-orbital canal in the track of the superior maxillary nerve. The spot above mentioned, was tender and somewhat swollen. Touching it, immediately induced a paroxysm. Occasionally a paroxysm commenced with pain in the frontal branches of the supra-orbital nerve.

All other means having failed to afford benefit, and encouraged by the result in Mr. B.'s case, I resolved to attempt an operation for this man's relief. I cut down upon the branch of the supra orbital nerve near the supra orbital notch, and excised the principal of them to the extent of about three eighths of an inch. I then cut down upon the infra-orbital filaments near to the infra-orbital foramen, with a view to treat them in a similar manner, but the bleeding was so profuse and protracted, that I was unable to see them, and therefore had to content myself with simply dividing them. In a week after the operation, he was entirely free from the neuralgia, for the first time since his attack, which occurred about seven years before. At this time I lost sight of him, and did not see him again till about two weeks ago, when he called at my office. He then informed me that he continued relieved for six months after the operation, and that the neuralgia returned shortly after the incision in his cheek had healed, or in other words, as soon as the divided nerves had united. The paroxysms were very severe, appearing at intervals of ten or fifteen minutes, and lasting about five minutes. The pains seemed to begin in the spot already alluded to, about midway between the side of the nose and the infra-orbital foramen, and to shoot back along the course of the superior maxillary nerve to the Casserian ganglion, thence they radiated, as from a centre, to the right side of the head, lower jaw, etc. While reflecting on his case, and the great relief which the simple division of the infra-orbital branches had afforded, it occurred to me that if I



could remove a portion of the trunk of the superior maxillary nerve from the infra-orbital canal, the relief produced by the operation would probably be of longer duration and might even be permanent. The patient stated his willingness to submit to almost anything which would be likely to rid him of his sufferings, and by my advice entered Bellevue Hospital, on the day already mentioned, for the purpose of having the operation performed.

The infra-orbital canal can be opened in two ways, so as to expose the superior maxillary nerve. The first method requires for its performance, the upper lip to be cut through, the cheek to be divided and dissected off from the upper jaw sufficiently for the antrum to be opened with a trephine. Then the roof of the antrum can be cut away in such manner as to expose the nerve. But it will be observed that this procedure requires the operation to be complicated by opening two cavities, viz.: the cavity of the mouth and the cavity of the antrum.

I practiced the other method in the following manner; my colleagues, Drs. Crane and Sayre, giving me efficient assistance. The patient being fully etherized, I commenced a semi-elliptical incision by entering the knife on a level with, and about three quarters of an inch external to, the outer canthus of the right eye, cutting through the skin and adipose cellular tissue, in a curved direction, downwards and inwards, almost to a level with the alæ of the nose, then cutting upwards and inwards, also in a curved direction, along the side of the nose, terminating the incision on a level with, and half an inch internal to, the inner canthus of the same eye. The incision was carried down to the malar and superior maxillary bones, and the oval flap carefully dissected up to the inferior margin of the orbit, thus freely exposing the spot where the nerve escapes from the infra-orbital foramen. The spouting vessels were tied as fast as they were exposed; I then proceeded to carefully detach with the handle of a scalpel, the flap from the margin of the orbit for a little distance backward, the eye-ball being at the same time carefully pushed upward by the fingers of an assistant, so as to give more room for the necessary manipulations. Then the flap and eye being carefully held up by two bent spatulæ; I applied a small sized trephine to the margin of the orbit, directly above the infra-orbital foramen, and removed a button of bone, thereby converting that foramen into a notch, and opening the anterior portion of the infra-orbital canal, thus exposing the trunk of the superior maxillary nerve. The trephine should be used with caution, for if too much force be employed, the operator will unwittingly push the instrument downward and backward into the antrum. A tenotomy knife was now thrust into the canal, and the nerve divided as far back as possible. The distal portion of the divided nerve was then turned forward and carefully removed. By this method, we excised fully a half inch of the nerve in question. We had troublesome hæmorrhage from the infra-orbital artery, which required the actual cautery to arrest it. A sharpened stick of lunar caustic was then thrust into the canal and held there for a couple of minutes for the purpose of destroying the nerve to a still greater extent. It will be observed that neither the cavity of the mouth nor the antrum was opened. The excised nerve appeared to be healthy at the point of division, but its external or distal portion was thickened, indurated, and reddened. The flap was replaced and secured by two points of interrupted suture, and the cold water dressing ordered. The

patient was put upon a low diet, and directed to take morphine *pro re nata*. During the first day after the operation he had comparatively little pain, but on the second and third days his sufferings were very severe, which was probably due to the thorough cauterization of the nerve. On the fourth and fifth days the pains gradually abated, and on the sixth day he went out of the hospital relieved. Fully two-thirds of the wound had united by the first intention; the most depending portion was left to heal by granulation. The operation was followed by little or no constitutional disturbance. The eye was not interfered with, and the deformity was slight.

The patient promised to visit me, from time to time, in order to afford an opportunity to observe the progress of his case.—*New York Journal of Medicine*.

October 1, 1856.

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From the N. J. Med. & Surgical Reporter.

*Reminiscences of the Late Dr. Physick, and a few of his Contemporaries.*

TO THE EDITOR OF THE REPORTER.

Dear Sir : I agree in the opinion expressed by you a short time since to the effect, that those biographies of great men, which are confined exclusively to details of their professional abilities and duties, are not always calculated fully to satisfy the closer and more intimate inquiries even of such students as may be the most eager to follow after them in their particular callings, and the best disposed to confide in them as practical guides and teachers of the sciences.

We can, all of us, admire and form either a higher or a lower estimate of men's acquirements as orators, statesmen, and divines, by witnessing their public displays, and of the skill of physicians and surgeons by reading their treatises and the records of their successful operations. But admire the exalted members of those several professions as we may, on account of what we hear and see of them in their public careers, there still remains a strong and natural desire in most minds to know something, however trivial, of their private habits, actions, and sometimes, as exhibited behind the scenes, and when they were protected from public scrutiny. We are still anxious to see them stripped, if possible, of all the formalities and technicalities of the schools; of their glowing sentences and commanding attitudes and gestures as orators; of their fervor and ingenuity as statesmen; of their solemnity as divines; of their mystery and penetrativeness as physicians.

But while we confess that, in common with most readers of biography, we should be pleased to find in the published lives of the generality of our great men some well-authenticated details of their private characters and social habits, we are at the same time ready to admit that in many cases such details would have no very beneficial effects upon private or public morals. Unfortunately, the old saying is too true—Virtue is not always allied with greatness.

The private lives of really good and great men are usually so simple,

so unpretending, and, consequently, so free from "striking incidents," that it is not easy, even after much labor of research, to distinguish them from those of other virtuous men who have trod the paths of existence in obscurity; while on the other hand, the lives of many men who had become great and famous in the arts and sciences, could be crowded with details that would shock not only religion and morality, but the commonest feelings of our nature.

So truly were the life and character of the late Dr. PHILIP SYNG PHYSICK identified with all that is really "good and great," as included in the class first mentioned, that I already regret the promise I made to furnish you with some reminiscences of his domestic peculiarities; for, when I endeavor to look back to a period now distant more than half a century, I can remember but little that might not be comprised in the simple but comprehensive expression "really good and great."

As I informed you in conversation, I was between eleven and twelve years of age when I was first introduced to the eminent physician and surgeon whose name has just been mentioned, in the capacity of "traveling companion;" an expression which you will easily understand to allude to the little fellow that was formerly seen occupying the left hand corner of the "doctor's chair," as it stood at the door of some sick citizen, with the reins of the horses' bridle in one hand and a book in the other. I say as you might *formerly* have seen those things; for, although I often observe boys now in pretty much the same positions their predecessors occupied in my time, they are too generally minus the book. I hope the doctors, their employers, will attend to this, and, perhaps, their boys will remember them with tears of gratitude fifty years hence.

But I beg pardon, Mr. Editor, for this digression, as well as for this apparent egotism. I say apparent, because, as the travelling companion of the doctor, I shall not always be able to speak of him without, as I apprehend, making a reluctant but necessary allusion to your humble correspondent.

The interesting introduction referred to above took place on a cold morning early in the winter of 1803. There—that is to say, in his office, at his residence, the first door below Sixth in Arch Street—you might have seen the dignified Doctor Physick in familiar conversation with the poor mother of a poor little boy, for whom she was endeavoring to procure a comfortable home in exchange for very light services. And there you might also have seen three doctor's students peering over the tops of their books, evidently more intent upon listening to the terms of the "bargain and sale" than interested in the medical and surgical terms in the printed pages before them. When the treaty was concluded, I thought they looked pleased at me, for it stipulated, on the doctor's voluntary proposal, that I should be sent to Benjamin Tucker's Night School every winter until I was old enough to be put to a trade, or otherwise disposed of. The doctor then addressed me, and admonished me to be a good boy in a voice so silvery, so kind, and so touching to my feelings, that for the first time I ventured to look up into the face of so fine a gentleman, through my tears, and was met by one of the most benignant and animating smiles I ever received from the countenance of man. No person that I have ever met with since in the wide world, and I have watched the countenances of thousands in many countries, ever smiled such an expressive smile of benevolence as Dr. Physick. Its beams seemed radiant with goodness that

came glowingly from the heart, and they could not but fall soothingly upon the young and unpractised hearts of those for whose consolation and encouragement they were often intended. But here I must correct myself. There was, indeed, one other person at whom I delighted to steal a glance while I lived with the doctor—a plainly dressed lady of most engaging mien, whose face would radiate, like the doctor's, with benevolence—whose voice and tones could touch, like his, even the heart of a friendless and apparently thoughtless boy. That lady was Dr. Physick's sister, the mother of the late Dr. Dorsey. How little do those great people know of the human heart who imagine that poverty is strong enough to shut out all the finer sensibilities of the heart, or deprive it of the secret pleasure it derives from the contemplation, and in silently venerating and loving the virtues, of those to whom custom forbids them to speak.

In his dress Dr. Physick was remarkably neat, and even particular, as, indeed, were all persons of his day, who were desirous of maintaining, in their own personal right, the distinctive appellation of gentleman. Yet his neatness and evident attention to dress were by no means singular, neither did they produce anything in his appearance or manners which resembled stiffness, formality, or frivolity. There were many well-dressed fops and dandies of the old school in his days, as there are of the new school in our days; and the former had traits which distinguished them from true gentlemen, just as individuals of the same *genus homo* present peculiarities to us now.

The dress of Dr. Physick was, therefore, such as was considered essentially necessary to the dignity of a professional man. Since his time, however, great changes have taken place in the costumes, and many changes also in the manners of men. The morning toilet of a practising physician, as may easily be judged, was an important and a troublesome affair some fifty or sixty years ago. Few medical men in this era of hurry and excitement take time to shave off their beards, and none of them would be so perfectly silly and ridiculous as to powder their hair!

It was the common practice of Dr. Physick to rise early in the morning, as it was to retire early to rest. The first duty he performed was to read a chapter in the New Testament, a copy of which was deposited in the recess of the back parlor window at which he shaved himself.

This daily practice, let me here remark, did not escape my attention, young and uneducated as I was. I had, indeed, read portions of the Holy Scriptures in a class of boys at school, and heard them read by my mother, but I had attached no definite importance to their character or meaning. Observing, however, how quietly and how reverentially the doctor read his lesson every morning, I conceived a new idea in regard to the intrinsic worth and sacredness of the volume; which idea, perhaps, has ever since retained, at least, a portion of its early influence over all my subsequent reflections on religious questions, especially when disposed to doubt or reject. So much, then, in brief, for the good examples set by great men, and for the deep and lasting impressions they make on the susceptible minds of youth.

When fully prepared to visit his patients, no sample of the physician or of any other profession of the present day could well be compared to Dr. Physick for dignity and gracefulness of appearance. He generally wore a gray or light-colored dresscoat, cut after a fashion which is not yet entirely out of date; a white or neatly figured double-breasted Marseilles

vest, light cassimere small clothes, white silk stockings, shoes or boots, according to the season, highly polished. One peculiarity of his dress was a fine muslin cravat, the corners of which were tied in front, forming a knot very much resembling the intersecting leaves of a full-blown rose. And thus tastefully attired, but in all which, as we have before remarked, there was not the least show of affectation or foppishness, and with a cheerful and happy countenance, he would take his seat in "the chair" by the side of his traveling companion, seize the reins, give a chirrup to the quiet old mare, and sally forth upon his daily rounds through the city and country, carrying hope and consolation, if not health and life, by his very presence into the gloomy chambers of his patients.

But in attempting thus minutely to describe the outward characteristics of Dr. Physick, let it not be understood that he was the only one of the medical profession in his day who was the "observed of all observers," or that his celebrated contemporaries were less careful of their dignity and personal appearance as gentlemen than he was. Often, indeed, does an active memory, which warmly clings to the "light of other days," gratify me with a backward journey to the men and the fashions of my youth. Often, as I pass through some of the old and once familiar quarters of the city now hemmed in or driven from their ancient propinities by the bustle and confusion of business and commerce, does my imagination re-assemble at the door of some quaint family mansion of the olden time—now converted, perhaps, into a rum distillery or a low tavern—the forms of Dr. Rush, Dr. Wistar, and Dr. Physick, standing, as I have seen them stand, apparently conversing on familiar subjects at the close of an important consultation in the case of some prominent actor in the war of the Revolution, whose name has long since been forgotten, notwithstanding the military fired three rounds over his grave, and the sweet-toned bells of Christ Church tolled his requiem in melancholy numbers.

In such reveries as this, Mr. Editor, which are by no means unpleasant at my time of life, I examine once more, with all the intensity of my boyish curiosity, the marked faces, and all the outward peculiarities of the three great medical counsellors, whose honored names have just been mentioned; their powdered heads, their striking attitudes, their breeches, their knee-buckles, their silk stockings, their black and shining shoes, and above all, the ease and dignity which so greatly distinguished all three from those who passed them by, but not without observation and the occasional interchange of such bows as we seldom see in these days of practical heedlessness. There I behold once more the mild, the thoughtful, the penetrating eyes and attenuated features, the compressed lips, the folded arms, and slender form of the signer of the Declaration of Independence. There, also, I see again the stouter and more compact figure, the ruddier face full of health and animation, the hands clenching each other behind, of the second on my list of old acquaintances, made such only by my having frequently seen them. And there, again, I see the more erect form, the symmetrically proportioned limbs, but, above all, the benign and manly look, so full of truthfulness and pure elevation of purpose, the face at once so classical in its contour, and so firm in all its lineaments of my respected and admired patron, Dr. Physick.

How vivid must have been the impress made upon the minds of the older and keener observers and admirers of those great lights of the medical profession, seeing that the personal appearance of each is still re-

tained with accuracy in the mind of one who has seen but little of either of them since the year 1806 !

After his morning visits, which included his attendance at the Pennsylvania Hospital, and, if there was yellow fever at the Wigwam, on the Schuylkill, or, perhaps, at Bush Hill, Dr. Physick returned home and dined with his family on the most simple fare, indulging in a few luxuries, but in no excess. Indeed, he had no time to spare for anything of that nature, his afternoons being devoted to his lectures, which were then delivered in the Pennsylvania Hospital; or, in the summer season, to his patients in the country and suburbs of the city. On the latter occasions, when we were clear of the rough pavements, pursuing our way upon some quiet road, or through a shaded lane, such as in those days led in every direction from the city—they are crowded streets now—my humble but susceptible heart was often delighted and encouraged to hope for something in the future; from the doctor's condescension towards me, his familiarity in asking me questions relating to the progress I had made at school, encouraging me to read, even calling me his little student, and telling me what he proposed to do for me when the proper time should come, if I continued to be a good boy. Alas! that time never came! But that it did not come was no fault of the good doctor's, and I may say, also, that it was not *entirely* mine.

On occasions like those mentioned, Dr. Physick would often sing, in low and sweet tones, snatches from such songs as the "Beggar Girl," "Far Beyond the Mountains," "Banks of the Dee, and other simple and popular airs of that day. The tranquillity of the scenes through which we were passing seemed to have a genial influence on his musings and reflections, creating feelings of such exquisite pleasure as could only be expressed, as expressed they must be, in words of hope and kindness to the poor boy that sat beside him, or in the touching notes of a favorite ballad. He had, indeed, just left the presence of his own dear children, for whom he always manifested the most tender affection, and, young as I was, I thought *that* was one of the reasons for his gentleness and sympathy towards me, who had no claims but those of humanity upon his attention. But he did not know how deeply my young heart was affected by his looks, by his words, and by his most trivial actions; how it was silently receiving memorials and impressions that were never to be effaced so long as life endured.

To convince you, Mr. Editor, how intimately real simplicity and goodness of heart were blended with true greatness in the character of Dr. Physick, permit me here to relate an incident, which, artless as it may seem, will speak volumes for the generous susceptibility of his nature. In his family there lived a pleasant and lively girl, about my own age, who was employed as an under nurse, or attendant on the Doctor's two daughters, Sarah and Susan. During the summer, the family, or the greater portion of it, removed to the country, and occupied an old-fashioned mansion which stood on the brow of a hill which overlooked the Schuylkill, immediately in the rear of what was then called the Upper Ferry—Fairmount now. The house was an ancient affair. It had been used, in revolutionary times, as a hospital and barracks for the British, when in occupation of Philadelphia. There were some evidences of this fact remaining, especially in the cuts and gashes which were to be seen in the oaken floors, on which it was supposed the soldiers had been in the

practice of chopping and splitting their fire-wood. The old "country-seat" had the bad but common reputation of nearly all old houses, even in that advanced era of intelligence, of being "haunted." In the middle of an extremely warm and oppressive night, near the close of the summer of 1804, the whole household was awakened by a loud crash, which echoed through every apartment, and which made a noise as if the entire contents of a corner closet—glass doors, china-ware, crockery, silver-ware, and all—had been suddenly broken to atoms. I was sleeping on a cot on the landing at the head of the garret stairs. I awoke in great terror, and although the light of a brilliant moon shown in at the window, and although the heat was intolerable, I wound myself, head and all, so tightly in the bedclothes, that I would in all probability have smothered had not the Doctor come to my relief. When my sight and free respiration were restored, there he stood, with a war-like weapon in one hand, and a lighted candle in the other, buttoned up in his flannel wrapper, and flanked on either side by the coachman and waiter, and covered in the rear by the housekeeper and some half a dozen other females, comprising the cook, nurses, chambermaids, etc. Their object was, of course, to discover the cause of the noise which had so dreadfully disturbed the house, every other department of which had been examined in vain, including the fearful parlor in which the confusion had seemed to commence. But there stood the closet in its usual corner, silent and undisturbed; and opposite, and equally unconscious, the tall eight-day clock was swinging its pendulum, and clicking away the solemn hour of midnight. And next they thought of mounting up to the garret, to ascertain what John, who about that time was said to be growing somewhat mischievous, had to do with making the racket. But it was to no purpose that I was stripped of my covering, for which I then had other use than to screen me from the ghost. In vain was I directed to make various movements and contortions of my light and slender body. Nothing could be adduced, from all the changes of position I was able to produce, that it was "I that did it," and I was finally left to my reflections, but not to repose.

In the morning, after the strange proceedings of the previous night had been thoroughly examined and discussed by the servants, under the monitorship of the venerable housekeeper, I met the little nurse with the children on the shaded lawn in front of the old mansion. "Oh, John," she said to me, "I am sure something dreadful is going to happen. That noise we heard last night is a death-warning for some one, but for whom we cannot tell. It may be for *me*, it may be for *you*, but it is for some one here, for I heard my aunt say that such noises foretold the death of my dear mother and father."

Had I been a young philosopher of the present enlightened age, I would have boldly combatted the superstitious idea which had taken possession of the poor girl's mind. But, unfortunately, I was as susceptible as herself to ghostly apprehensions, and could only "wonder who it would be." I had read and studied and sung many of the old ballads, such as the "Ghost that came to Margaret's door," and was not prepared to ridicule or to deny the opinions advanced by the simple-minded girl.

When the Doctor got into the chair to drive to the city, I thought that he did not look as pleasant and cheerful as usual. His countenance wore a disturbed and melancholy cast, not unlike that which I had remarked

in the looks of the little nurse. Perhaps *he* wondered, as *we* had done, "who it would be." So I thought then.

In the evening (having dined, as was his custom, at his house in the city), the Doctor returned to his family seat. As we approached the mansion, I was surprised not to see my gentle friend, the orphan nurse, on the lawn, in company with the children, where I had been in the habit of meeting with her when we arrived, and chatting a few moments about what was going on in that portion of the family left in charge in the city. She was not there. She had not hidden behind any of the great oak-trees, which, in her playfulness, she was sometimes wont to do. The children met their father alone. I felt alone, sad, and disappointed, and, I think, apprehensive, for I was still *wondering who it would be*.

"Where is Kitty?" asked the Doctor, in a kind tone, apparently as much surprised and as anxious at her absence as I was. "Poor Kitty is sick," answered Sarah, the eldest of the children. "Kitty is, indeed, very ill," said Mrs. Physick, as she greeted the Doctor.

Of course, the good Doctor lost no time in visiting the sick girl. He found her, as I was told by one who attended on her, in a "raging fever, and completely out of her head." Of course he did everything that his skill and his benevolence could suggest to alleviate her sufferings. But her too sensitive mind had received a shock greater than her delicate nervous system could sustain, and she sank rapidly. Such was her excitability, that, on repeated applications, I was forbidden to see her; but, in despite of the interdiction, on the fourth evening of her illness, I stole noiselessly up to her chamber. Here I found the Doctor standing at a window, with his back towards the open door at which I entered, conversing in low tones with the nurse; he did not at first observe me. Not so the patient. Her restless eye flashed upon me in an instant, and she exclaimed, in a wild but tender voice, "John, John, you need wonder no longer who that terrible warning was meant for; it was for me—for *me*, and not for *you*." Hearing her words, the Doctor started, and seeing me approaching the bed of the dying girl, mildly but firmly rebuked me for my intrusion, and bade me leave the room immediately. The intense light of her dark, expressive eyes followed me to the door, but they were soon after closed in the dim shadows of death. \* \* \*

It was on a beautiful evening in September, and at an hour when the sun had so far gone down in the west as to cast a melancholy shade over the trees and shrubbery that bounded the deep, rocky, and narrow road that led up to the old "country-seat," that we arrived at a point at the foot of the hill, on our return from the city. Just as we reached it, we heard the rumbling and crashing among the rocks of a descending carriage, which, when it came fully in sight, proved to be an old-fashioned Jersey wagon, belonging to the Doctor, from the open front of which protruded the foot of the coffin which embraced the remains of the beloved and lovely little nurse. The chair was immediately drawn up on one side of the narrow road, to "let the coffin pass." "Poor Kitty!" exclaimed the Doctor, in an affectionate and mournful voice; "dear little girl! we shall never again meet her innocent face among the happy children." The coffin passed on its way to the house of Kitty's credulous aunt, from which the funeral was to take place; but the tender words of the Doctor were buried in my heart. When I looked up, the good man was brushing away the tear-drops from his cheeks, which, as they were mingled with those of his humble companion.



But all such relations as the above, of such a man as was Dr. Physick, some of your readers will probably say, are puerile! Be it so. If such are not evidences of true greatness, then there has never been any true greatness exhibited to the world. But Dr. Physick was indeed a great man, a humane and a benevolent man, a Christian man, a brave, and a courageous man—all which he established in an eminent degree by his tenderness, his sympathy and his charity for the poor.

Still, it must not be supposed that the Doctor was entirely free from the infirmities which belong to our common humanity. He had his moments of irritability, if not passion, as well as other men; though he probably took more care than is usual to restrain his natural impulses. I have witnessed those little gusts of feeling, however, which will sometimes darken the most placid brows, and was myself, no doubt, often the occasion of them, for I was only a wayward boy at best. The least manifestation of disobedience, impertinence, or of neglect of my person or dress, was rebuked at once by a single glance of displeasure, which was not to be misunderstood or forgotten, even by a person of my years. It was thus with his students, some of whom were, as I presume students are at this day, given somewhat to fun and frolic. The dignity which was ever a conspicuous trait in the character of their preceptor rendered it impossible for them to be anything but the most perfect gentlemen in his presence. I was formerly in the habit of meeting with several of those students, long after I had grown out of their recollection, and I was always forcibly reminded by their easy and courteous manners, even on the streets, of the personal character of Dr. Physick.

The last time I ever saw Dr. Physick, was some thirty-five years ago. I called upon him with a message from one of his poor patients. He was in his office, in rear of his residence, then in Fourth below Spruce Street, surrounded by a crowd of sick and diseased persons of the same class, to whom he was busily engaged in administering, gratis, all the alleviation his well-stored mind and generous heart could afford them. He rests in peace, for it was his object to live in peace and charity with all mankind.

Very respectfully yours.

Burlington, N. J., Oct. 1856.

From the Medico-Chirurgical Review for October.

*Influence of the Climate of Peru on Pulmonary Consumption.* By  
ARCHIBALD SMITH, M.D.

The various climates of Peru, as changed or modified by the measure of elevation from the sea, and other local causes, are not merely curious to the meteorologist, but more especially interesting to the physician; they are, above all, important in relation to the development in some localities, and the disappearance in others, of phthisis; this point I shall now endeavor very shortly to illustrate.

1. *What are the Localities or Climates in Peru in which Phthisis is most and least Prevalent?*—This disease is properly a product of the warm and humid valleys of the coast, such as that of the Rimac. And

from Lima, where you have an extensive view up this valley, to the loftiest snow-clad peaks of the Cordillera, every gradation of climate is unfolded in the intervening distance, that one would have to pass through, in a voyage of many days, from Callao to Cape Horn. And in the inland glens beyond (as in the often-mentioned vale of Huanuco), we have noticed how the extremes of climate are brought within much nearer limits than those embraced even in this picturesque and imposing bird's eye view from Lima—especially from the bridge, looking eastward. Nor is there, in all this range of climate, a locality in which phthisis is more prevalent than in the mild and equable temperature of the capital and its immediate environs.

Piura, the most northern province of Peru, though within two or three degrees of the endless moisture and vegetation of the Equator, is yet the most hot and arid in the republic. Its maritime district is also considered the most healthy on all the coast, and remarkably free from pulmonary disease or consumption. In the pastoral sierra—viz: on the lofty slopes and colder plains of the Andes, pleurisy and pneumonia are not unfrequent; and sometimes terminate in the worst manner, by supuration or gangrene, when left, as usually happens in remote Indian villages, without medical assistance.\* Phthisis pulmonalis is, I am persuaded by a long residence in these mountain regions, little known to the native population, except as imported to the hill-land from the coast. In those warmer valleys in the centre of the Andes, where the temperature is sufficiently favorable to the growth of the banana and sugar-cane, we meet with frequent development of hepatic disease; and when the climate is particularly warm and humid, as in the province of Huamalies, on the borders of the Montaner, we even meet with severe examples of ague; and these situations are but ill calculated to restore the health of a consumptive invalid. I resided for several years in the vale of Huanuco, which—as previously mentioned—is dry, and free of malaria, at an elevation varying, as it extends along the banks of the river, from six to seven thousand feet above the level of the sea, with the thermometer rarely, throughout the entire year, above 72°, or below 66° Fahr. in the shade. But this climate, though equable, did not prove favorable to the convalescence of phthisical patients brought there from other parts of the country; and I cannot say that I ever saw a case of phthisis originate in that locality. In like manner the cold—often damp and variable, and always highly rarefied—atmosphere of the mining district of Cerro Pasco, and other localities near the snow-line, is unfavorable to recovery from Phthisis. But Huarriaca, which lies in the descent from Cerro to Huanuco, is very favorable to such recovery, as I had frequent occasion to test when at the mines; whence we usually sent our patients from pulmonary affections to convalesce at this desirable place, distant eight leagues of pretty rapid descent from the silver mines of Cerro Pasco. Huarriaca is in climate very like Obrajillo, on the western slope of the

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\* The Indians have many native remedies for what they call *dolor de costado*, or pleurisy; but I found, in Cerro Pasco, bleeding, followed up by tartar emetic, most efficacious. In the Sierra, bleeding is better supported than on the coast, where twelve ounces of blood is a large bleeding among the white Creoles. In Lima, where the lancet cannot be used safely, tartar emetic, pushed in small doses, alone or combined with morphine, to the extent of from twelve to twenty grains, generally subdues either pleurisy or pneumonia.

Andes, and is one of those recesses in the Andine glens and defiles very productive in maize, corn or wheat, potatoes, beans, and natural pastures on the heights, as well as cultivated lucern on the straths. Such, indeed, are the marked localities, blessed with a steady temperate climate, and a dry air of about 60° Fahr. in the shade, as well as sunny cheerful sky throughout the greater part of the year. Such are the localities where phthisis proper, or tubercular disease of the lungs, is only known as an exotic!

2. *The Proportion of Deaths by Phthisis compared to other Diseases on the Coast of Peru.*—This proportion, for want of satisfactory statistical returns, can only be answered at present in respect to the capital, and even there only approximately. From data before me—let us take the mean of ten years, say from 1841 to 1850, inclusive—the average may be struck at 3,200 deaths annually, of all diseases, in Lima. Of this gross sum, the monthly hospital returns account for 1,700; while a somewhat less proportion—viz: 1,500, are indiscriminately entered in the report of the general cemetery under the title “various diseases.” But from the more specific evidence as to details, furnished by the hospital reports, I will here state the average mortality for the ten years, given, in 1,700 cases yearly, as follows:

|   |       |
|---|-------|
| From fever.....                           | 600   |
| From dysentery and chronic diarrhoea..... | 480   |
| From pleurisy and pneumonia.....          | 160   |
| From phthisis pulmonalis.....             | 320   |
| From sundry other diseases.....           | 140   |
| Total.....                                | 1,700 |

Thus, next to fever and dysentery, phthisis was the most fatal disease known in Lima up to the first visitation of yellow fever in that country, from the years 1851 to 1854, as described and recorded by me in No. 203 of the “Edinburgh Medical and Surgical Journal,” but with which, in our present estimate, we have nothing to do. If it can be shown in this way, that in 1,700 hospital cases of fatal termination annually, 320 of these deaths proceed from phthisis, we arrive at an average proportion for the whole mixed population of Lima admitted to hospital treatment. And further, if we put to one side the indefinite number of deaths from infantile diseases, among the 1,500 indiscriminately sent from the different parochial wards of the city, and included under one common head—viz: “various diseases;” there appears no reason why, among the remaining adult population included in the said gross parochial deaths, as distinct from the more detailed and special hospital returns, the ratio of deaths from phthisis, *as compared to other diseases*, should not be approximately the same as it is found to be in the 1,700 who died in hospital, where the proportion has been pretty reliably ascertained as above, to be about 3 in 17.

3. *In what Stage or Form of Phthisis is it found Curable by a Change from the Climate of the Coast to the Sierra?*—On the coast generally, the most usual exciting cause of pulmonary affections is observed to be some check to the perspiration (*resfrío*;) and not only pulmonary complaints, but rheumatisms, diarrhoea, and fevers acknowledge this origin. It is more particularly in spring that we see the effects of

this *resfrío* in hospitals crowded with patients under the influence of febrile catarrh, pneumonia, pleurisy, and phthisis pulmonalis. When the frame becomes much debilitated, and especially when the patient is convalescing from some prior ailment, it is a familiar event that under these circumstances, incipient phthisis presents itself, in the form of such admonitory symptoms as growing debility, failing appetite, a slight dry cough, feverish pulse and heat, with restlessness and wakefulness by night.

In the dry and sultry summer months cases occur under a different aspect, in which, from the beginning, the gastric system is more ostensibly disordered. The tongue whitish-colored and furred; evening fever and sleepless nights; a short dry cough; depression of spirits, with a foreboding of pulmonary consumption or hæmoptysis on the part of the invalid, are so many symptoms which attend this form of attack. In all cases, whether originally of the gastric or pulmonary type, the patient or physician must not waste time in the employment of unsuccessful special remedies. And the plain reason of this practical admonition, which indeed amounts to a popular maxim in Peru, is that a change from the coast to the mountain climates, graduated as the case may require, will do more to restore health than all the drugs within their ken; and that, if this easy migration be too long deferred, confirmed as well as hopeless phthisis will be the end of disorders so initiated on the coast.

But though it be here necessary to characterize such examples as the above, in pointing out the introductory forms which phthisis assumes in Peru; yet it is important to bear distinctly in mind, that the most common prelude, as well as attendant, of the Lima phthisis pulmonalis, undoubtedly is hæmoptysis; to which there appears to be a remarkable predisposition among all the mixed classes and races of the population, particularly in the white, Creole, and brown females of preponderating Indian caste. The healthy, full-chested, mountain Indian mother, if engaged in the maternal duty of suckling her young on the coast, often acquires a predisposition to hæmoptysis, to which she has shown no tendency whatever so long as she lived and nursed on the mountains. On the hill-land the ordinary functions of the digestive organs are vigorously exercised; while on the coast, the long-continued influence of a warm and humid atmosphere not only keeps up a relaxation of the skin, but induces a more languid appetite, and a less perfect and healthy action of the stomach and bowels, &c., which soon tells on the whole system. Europeans soon become lazy, and unwilling to take exercise on foot, in the Lima climate, and suffer a great, though gradual, loss of nervous and muscular power. The offspring, especially the male offspring, of the athletic Spaniard, grows up a comparatively delicate man; but the negro race thrive well on the coast, and retain the muscular power of their progenitors. The white family always suffer more or less from a protracted residence in Lima, where congestive diseases are sure to arise in this race; and more particularly the prevailing disorders, hæmorrhoids, blennorrhœa, dysentery, &c.

Whenever hæmoptysis shows itself in Lima—which it often does in the Creole ladies after an evening party (*tertulla*), without any previously perceived sign or suspicion of so great a misfortune—the circumstance is always one of alarm.

The spitting of blood may be very slight at first, and attended with a

slight cough; and from so apparently simple a beginning, experience and common observation lead the patient, friends, and physicians together to fear the approach of phthisis, unless the hæmoptysis and cough can be speedily subdued. As a general rule, in such cases, phthisis is always suspected to lurk in the background, unless its incubation be promptly checked by a change of climate. The ordinary result is, that those so circumstanced, especially when of the delicately-organized, fair, Creole race, very rarely trust to medicine or to the assistance of the physician, but at once order the mules and other necessary arrangements for a journey to the interior. It is only by this decided conduct that they hope permanently to guard against a future and more formidable return of hæmoptysis, with its phthisical consequences; and they seek at first notice of the disease to insure a full reparation of the injured respiratory organs, by an adequate continuance in the well-known and appropriated regions of convalescence.

When cases thus inaugurated—which are far too frequent in Lima and other parts of the coast of Peru—go on for a few weeks, not to say months, without decided amendment under medical treatment, we may expect to find on examination positive signs of pulmonary consumption. Now, then, besides occasional returns of hæmoptysis more or less developed, varying from colored sanguineous sputa, to mouthfuls or even cupfuls of blood at a time, there is also more or less cough, soon attended by some degree of pain in the chest; depression of spirits, failure of appetite, with loss of flesh, and lassitude; some notable change in the respiratory sound, or perceptible deviation from the normal murmur, with almost always obscurity of sound on percussion under either the right or the left clavicles. No Lima junta of experienced native or well-acclimated European physicians, would for a moment hesitate to order to the sierra a patient in the condition I have just described. They would deem this transfer of climate as the only security for the patient.

Under such conditions I have witnessed the application of all approved European remedies of every school fully tried, where the phthisical patient was, for one reason or another, destined to run his course on the coast and in the capital, under the eye of able assistants, but always with the same fatal termination.

Cod-liver oil, extensively used of late years, has appeared to alleviate the pulmonary symptoms, by improving the habitual state of the digestive organs, but, as far as I know, it did no more in that country, whatever may have been its success in Europe.

I have sometimes seen cases of pneumonia, imperfectly cured, terminate in chronic phthisis, on the coast of Peru. I have also met with cases of passive and chronic hæmoptysis sustained by pulmonary congestion, or consequent upon heart disease, which never passed into phthisis. But such cases are easily distinguished for the most part, and I may just say in passing, that small doses of spirits of turpentine—say twenty drops thrice a day—have been useful in stopping these passive forms of pulmonary hæmorrhage.

In advanced stages of phthisis, attended with opaque and purulent sputa, colliquative sweats, bronchial and cavernous respiration, with all the aggravated symptoms of hectic fever—even in such a plight, the change from the climate of Lima or the coast to that of the Andine slopes (at modern elevations relatively to the snow line) has been known

to prolong life for years, and allow the patient renewed strength to return from time to time to the coast, with marked improvement in general health, as well as in the condition of the lungs, and quite free from fever. But after a few years, such partial convalescents have succumbed to a fresh accession from cold or other exciting cause. But while I state these facts, and could cite individual instances in point, it should never be forgotten that the timeous removal to the sierra is intended to prevent the advancement of phthisis beyond its first initiatory stage in the hæmoptoic form of invasion so prevalent in Peru, or to cause it to retrograde altogether, even from this primary condition. It must be clearly understood, therefore, that I claim the curative effects of the Andine climates, on the broadest grounds of facts and experience, in favor of the early stage only, and not the more advanced periods of pulmonary consumption, when there is, correctly speaking, no sound lung to rescue.

4. *What are the Inland Localities in Peru approved as the Best for Convalescence from Phthisis?*—I shall speak of the localities best known in, and most convenient to, the capital; other inland positions of corresponding temperature will naturally be resorted to from other points of the coast, according to their contiguity. On the Pacific coast of the Corderilla, and by the Pasco road from Lima, Haraway (usually pronounced Yaraway) and Canta are considered the best localities; and Huamantanga is also considered favorable; but Canta, above all, on this route, is allowed to be most desirable, being about twenty-five leagues from Lima, and at an elevation of 10,000 feet, on a height overlooking Obrajillo, which latter is in a hollow locked in by hills, and about 1,000 feet lower than Canta. Again, by the Zarma road from Lima, Matucana and San Mateo are favorable climates; the former, according to McLean, is 8,026, and the latter 10,984 feet high; and of the two, Matucana is considered the best. But Canta is found preferable to either as a place of permanent convalescence. Cullua, enclosed in a basin-shaped hollow a few leagues above Obrajillo, on the Pasco road, is 12,000 feet above the sea, and corresponds in climate with Chicla, a few leagues above San Mateo on the Zarma road, and at an elevation of above 12,000 feet, according to McLean and Herndon's reckoning. Both these localities are hostile to the phthysical patient.

When it is determined to pass the Cordillera for convalescence this is usually done by the pass of Yauli or by Tucto, to the temperate valleys of Zarma, Jauja, and Huancayo. The elevation at the pass of the Viuda mountain above Culluay on the one hand, and of that of Antarangra (also called Anticona) above Chicla on the other, is nearly equal, as far as can be determined by the measurements of different observers. McLean gives the one at 15,543, and Rivero the other—viz., that of the Viuda, at 15,500; the Viuda being 15,868 feet—just 1,000 feet above the line of glaciers or permanent snow. Across the Cordillera gates or passes (Portachuelas), the patient, if very weak, is conveyed in a litter, and if his direction be Paseo, he cannot remain there, but must at once pass through to Huarriaca, a climate quite analogous in temperature to that of Obrajillo, only with better ventilation. But physicians from Lima always send their phthysical patients (when ordered across the Cordillera) to Zarma and Jauja as the great sites of convalescence; and on the way to these celebrated localities, Matucana is the favorite resting place of phthysical and hæmoptoic patients. It is at this point, in the head-

land of the valley of the Rimac, enjoying a mild atmosphere on the confines of the air of the coast and the sierra, and just within the rain line, without being yet too wet or cold, that the invalids alluded to receive the first kindly impressions of improving health, and after a longer or shorter stay here, proceeded to those more favorable climates, in higher elevations, beyond the first Cordillera.

I should state expressly, that the extensive valley of Jauja, rather cooler in temperature, and also of a few hundred feet more elevation above the sea than Zarma (which Herndon gives at 9,738), is allowed to have a decided superiority for the recovery of the hæmoptoic and phthysical invalid. The climate of this locality is temperate, and productive of a great variety of grain and green crops. But for the cure of phthisis, the Montana climate, for at least eight months in the year, is too damp, and if the patient be not careful in ordinary ablution—which natives prefer doing when the sun shines—the body is apt to be chilled. Lieutenant Herndon experienced this effect after bathing, and cautions his readers on the subject.

I shall conclude these observations by endeavoring to solve an important problem bearing intimate reference to our present inquiry, and which I find suggested in Dr. James Copland's very elaborate and instructive article on Tubercular Phthisis, recently published in Part 17 of his valuable 'Dictionary of Practical Medicine.'

The problem I allude to is contained in the following extract:—

"Having ascertained the frequency of the disease in the aborigines of a country or climate, it is next of importance to know how far that frequency may be modified, diminished, or increased by change to other countries, either colder or warmer, or of higher or lower elevation, etc., and by the adoption of different food and other habits." [p. 1180, sect. 205.]

I beg the reader's attention to this quotation. I hope I may, without any undue pretension, be allowed to say that I feel not only authorized, but called upon as a matter of duty to record on this head the result of my long experience in different climates of Peru. I shall therefore remark that, as regards the native white Creole and the brown races of mixed blood, this problem may be considered as solved in cases of incipient phthisis pulmonalis attended with more or less hæmoptysis. By change to other countries—for example, to Chile, which is colder, or to Guaquil, which is on the *Equator*, and consequently warmer—the effect on the patient from Lima has been so often tried and found injurious, that this is a change of climate which no experienced resident physician would venture to recommend. But by proceeding inland to the valley of Jauja, at the elevation of ten thousand feet above the sea, such incipient phthysical cases—especially of the hæmoptoic type, as I have defined—are always relieved, and almost always cured, provided the patient remain long enough in the uplands to insure this result.

Time is required to bring about a radical organic change, for when individuals apparently quite recovered in Jauja descend to the coast, and particularly to the capital, within a few months the hæmoptic and other phthysical symptoms have been observed to return, rendering a longer residence in the sierra necessary to insure a permanent cure. A year's sojourn in the sanitary climate of the hill-land is usually considered indispensable in serious cases, which have demanded a transandine climate.

Milder cases and slighter indications of pulmonary disease, with tubercular development, often yield to a few months' residence at Matucana, Haraway, or Canta, on the western slope of the Andes, and not far from the resources of the capital.

The unvarying experience of centuries, perfectly relied upon by the natives, proclaims this change from the coast to the sierra climates, to afford undoubted beneficial results to the native white, as well as the diverse shades of brown and olive races of the coast, when laboring under hæmoptysis or pulmonary consumption. The negro is less subject to phthisis, and also reluctant to encounter the bracing air of the Cordillera; his favorite element is the warm and humid air of the coast. The influence of race in the cure of disease is wisely considered by Dr. Copland as of greater importance than has yet been bestowed upon it. In Peru, I found this truth constantly illustrated in practice. For instance, in dysentery, calomel and opium properly and timeously administered, are almost infallible in the Indian race, in the white far less certain, and in the negro cannot be depended upon at all. In yellow fever, turpentine cured as many as fifty per cent. of Indians, apparently in a hopeless condition, being sent to the Lazaretto, as it was believed, in an incurable state; but in the whites, turpentine, as administered by us in Peru in the year 1854 was of comparatively little power; and as for the negroes, we had no opportunity of ascertaining its effects, since in them this malady, so fatal to the whites, was scarcely experienced, except as a slight fever with headache, which by the aid of common enemata passed off in a few days, leaving no bad symptom or dregs of disease behind it.

But as regards phthisis, which we have been considering above, I have always seen cases of the character described by me turn out well through migration to the sierra. And I may truly say, that from my own long experience in Peru, and knowledge of these cases, I could easily recount a multitude of permanent cures, also familiar to many native physicians.

This result, as far as the natives are concerned—a goodly mixture and variety of races, we must admit—is simply conclusive matter-of-fact; and now that the communication by Panama is so easy, it may be worth while to test the effects of the Andine climate of Peru on the European phthisical invalid. I had little opportunity to do so with the English under my charge in that country, but as far as my experience went, it was as favorable to the European as to the native Creole. But allowances, no doubt, must be made for different habits of life and other causes. The benefit received by Peruvians in the instances in question are too evident to admit of cavil, nor can the good effects be explained on the score of mere change of scenery and the pleasures of traveling. All coast-born Peruvians leave the neighborhood of the sea and their native towns—above all, Lima—with extreme reluctance, and look upon sierra as a kind of Siberia—a place of privation and exile. But in spite of all these prejudices and dislikes, when they realize the change of the sierra, they are constantly seen to recover there, under conditions of pulmonary tubercular disease which would undoubtedly terminate fatally, and that very soon, on the coast.

On the mountains, the Limerian habits of diet are necessarily somewhat changed, and the invalids are naturally led to more exercise in the open air; but yet their in-door habits, with their gambling propensities, will ever predominate, whether on the hills or coast. Cards and dice,



indeed, are esteemed not merely an amusement, but an indispensable part of a genteel education.

The air of the mountains—in those elevated localities pointed to as suitable to the recovery of the phthisical invalid—is free from the malaria of the coast, and (as we have already learnt) clear, light, cool, and invigorating—alike removed from the extremes of cold or heat, and, upon the whole, remarkably equable.

On the coast, they continually drink in abundance cooling acidulated beverages, as lemonades, pineades, &c., and the classes in better circumstances (under the idea that a weakening climate needs strengthening food) use much more animal food than a climate so mild, with an indolent life, would seem to require. Indeed, all grades of the population consume great quantities of lard and pork, and also of fish fried in pans of boiling lard. This kind of cooking goes on in the open squares, corners of streets, and market-places, every evening and morning, for the convenience of the populace or lower classes, who thus feed in the open air at small cost of money and free from domestic trouble. Sweets, pastry, and fruits they eat at all hours, irrespective of their regular meals. On the removal of invalids from such a population to the sierra, the same facilities do not offer. The mountain diet is necessarily more simple, and the habits of life there assumed for the time, are more in unison with those of the rural population of the district.

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Communicated for the Boston Medical and Surgical Journal.

*Letter from New York.* By P. PINEO, M. D.

I listened to a clinic on *gangrene of the lungs and cirrhosis of the liver*, by Prof. Clarke, of the College of Physicians and Surgeons. He is a fluent and pleasant lecturer, and evidently a good teacher. He said that gangrene of the lungs was never the result of pneumonia, although pneumonia was often the consequence of gangrene. In the case presented there was the somewhat unusual occurrence of gangrene in both lungs. In one lung pneumonia was present while it was absent in the other.

The true cause of gangrene of the lungs he thought was always obstruction or obliteration, either from calcareous deposit or something else, of the artery supplying the part; and the same was true of gangrene of other portions of the body. The number of cases that get well is about fifty per cent. There had been two cases in the hospital this season, one of which recovered; the other furnished the pathological specimen which was shown to the students.

The symptoms diagnostic of the disease are, the intolerable factor, expectoration of the peculiar dirty-green matter, and rapid prostration. The treatment to be relied upon is a supporting one—tonics, and as much nourishing food as you can stuff into the patient, or his digestive organs will bear.

*Cirrhosis of the liver*, or atrophy and induration, is the result of inflammation of the capsule of Glisson. This may arise from any cause

which will occasion inflammation in any other part—but the habitual use of ardent spirits is the most frequenting exciting cause; hence the name of *gin drinker's liver*.

Prof. Van Buren, of the University Medical College, delivered a clinic on Gonorrhœa. He considers copaiva almost a specific for the disease when judiciously administered. It should be given in very small doses at first, and gradually increased as the stomach will bear it. In order to cure the disease, Dr. Van Buren says it is indispensable that the medicine should be continued for at least ten days after the discharge has ceased. Cubebs, though greatly inferior, may be resorted to when the stomach will not tolerate copaiva. Injections he would use, though very mild ones. A weak solution of plumbi subacetat he thought better than any other. He warned the class against giving strong injections of the more stimulating articles, such as argenti nitras, &c. He thought there was great danger of evil ensuing in the form of stricture, &c.

Additions are being made to Bellevue Hospital, which when completed will contain fourteen hundred beds. Through the politeness of Dr. Gouley, a very promising young anatomist, who filled the chair of anatomy at the Woodstock Medical College last spring, I was shown the new dead house, the culinary arrangements of the hospital, &c. Thousands of tons of coal are placed in the grounds of the Hospital for gratuitous distribution to the poor. The institution is a great charity and reflects much credit on the city of New York. There is a ward in the Hospital devoted almost altogether to ulcers on the extremities. A large number of cases were treated by opium, as recommended by Mr. Skey, surgeon to St. Bartholomew's Hospital. Cold water dressings were applied to the part, and a pill of soap and opium given three times a day, the patient getting from one-half to a grain of opium each dose. A good nourishing diet was allowed. The improvement in every case was positive and rapid. A few cases were treated with the actual cautery, and with good results.

In the syphilitic ward at the City Hospital can be seen all the forms of syphilis, from the simple chancre to the most revolting constitutional affections of the bones. The surgeon removed, from the forehead of a patient, a portion of the outer table of the skull, measuring three inches in length and two in breadth. The inner table was perforated by caries, and a probe was passed into the brain. Surely, any young man who visits the syphilitic wards of a New York hospital, will be deterred from exposing himself in any way by which he may possibly contract so loathsome, vile and wretched a disease.

*New York, October, 1856.*

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Communicated for the Boston Medical and Surgical Journal.

*Case of Infantile Epilepsy.* By ABRAHAM LIVEZEY, A. M., M. D.,  
Lumberville, Penn.

Mrs. M. was confined with her third (male) child—the previous one being 10 years old—in June last; it was of average size, and, to all external appearances, as healthful looking as a majority of infants met with.

At my subsequent visit, 48 hours after delivery, the mother remarked that she thought the "baby was not quite right somehow." Upon inquiry, I learned that he had taken the breast, in fact had nursed well, for the milk was in abundance, and the meconium had passed freely. I therefore concluded that the mother's fears were groundless, unless the "something wrong" might have been produced by overfeeding, and advised accordingly.

The next day, however, I was called in consequence of repeated convulsions having ensued. The infant still nursed well at stated intervals of three or four hours, slept well—would pass from a fit into a sleep, and from a tranquil sleep into a fit, apparently without pain. Meconium-like matter still passing freely; and under the presumption that this in excess might be the irritating cause of convulsions, I ordered twenty drops of ol. ricini, to be repeated if necessary, with much prudence exercised in reference to nursing. On the next day I was informed that though the evacuations were modified, yet the convulsions continued unabated. Upon a close examination, I could only detect a flatulent condition of the alimentary canal to prescribe for, and consequently ordered milk of assa-fœtida with friction externally. Still no alteration at the end of 48 hours, when finding some symptoms of acidity with biliary derangement, I ordered a small portion of hyd. c. creta, to be followed by twenty drops of oil, and by small portions of a mixture of soda, camphor, ipecac and opium every three or four hours. These were continued for two days without any alteration; at which time, thinking that "intestinal spasm" might be the cause, oil was again administered to remove all sources of irritation, followed by McMunn's elixir of opium as the mildest and safest anodyne, in small repeated doses, for several days—to be laid aside, if unsuccessful. For small doses of oxyde of zinc, advised by Dr. Rice, resident physician of the Western Infirmary, Philadelphia, which he had successfully employed in cases of infantile epilepsy, which from all the symptoms of the case, he was satisfied was of this nature. The zinc failing, I resolved to make a more decided impression upon the nervous system, and accordingly left a score of powders, containing a minute portion of copper, iron and quinine, one to be given every six hours. The convulsions began to abate in less than 24 hours, and in a few days had almost wholly disappeared. In ten days the infant was perfectly well.

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### *Medical Society of the State of California.*

We have been favored by a friend with the proceedings of the Convention, and of the Medical Society of the State of California, held in Sacramento, March, 1856. An invitation was addressed to the members of the profession throughout the State, which resulted in the assembling of about seventy-five physicians, representing sixteen counties, for the purpose of forming a State Society. The convention elected B. F. Keene, M. D., of El Dorado, President.

The principle objects accomplished by this meeting were, *first*, the for-

mation of a State Society, with a Constitution and By-Laws. *Second*, The adoption of the Code of Ethics of the American Medical Association.

A good primary medical education attested by a diploma from some known medical school of good repute; and a good professional and moral standing in the community, are conditions for admission into the State Society. A committee was appointed to prepare a bill and urge its passage, aiming to give legal recognition to the medical profession of the State, and as far as possible, to protect the people from empiricism.

Provision was made for the establishment of a Medical Journal, to be edited by Dr. J. F. Morse, of Sacramento.

A resolution was adopted commending a proper devotion of medical men to the interests of the profession, and expressing a "sovereign contempt for that species of professional mountebankery that seeks to secure public favor and pecuniary advantage, by foisting upon public attention, through newspapers and otherwise, the peculiar qualifications of their author to treat particular diseases, either in the department of medicine or surgery."

Standing Committees were appointed as follows:

On *Practical Medicine, Medical Literature and Hygiene.*

On *Surgery.*

On *Obstetrics.*

On *Medical Topography, Meteorology, Endemics and Epidemics.*

On *Indigenous Botany, or Domestic Adulteration of Drugs.*

On *Medical Education.*

On *Publication.*

A *Committee of Arrangements.*

A resolution was passed inviting members to propose subjects of scientific interest for discussion by the Society.

Also, one recommending the profession in the different counties of the State to organize County Societies, for the purpose of co-operating with the State Society in promoting the interests of the profession.

A Committee was appointed on Prize Essays. Measures were adopted to collect Zoological, Botanical and Mineralogical specimens.

We have thus given an imperfect outline of the doings of our brethren in California. We can not too heartily commend their zeal and interest in relation to professional matters. The tone and general bearing of the proceedings would do honor to much older communities.

It will be seen that the excellent Code of Ethics of the American Medical Association has been adopted.

We predict for the Society great usefulness, and that it will be an honor to the State, and that the profession will soon be enriched with valuable contributions from that far off region.—*Cincinnati Observer.*

## EDITORIAL AND MISCELLANEOUS.

## EDITORIAL CORRESPONDENCE.

PARIS, October 15, 1856.

*Dear Doctor*—You will, perhaps, be surprised at the reception of a letter from me, with the above date, from Paris, as you were apprised that it was my intention to have spent some weeks in London before crossing the Channel. But, upon my arrival in England, I found that circumstances, entirely beyond my control, made it necessary for me to reach Paris at an early day. My stay in London was less than a day—by no means long enough for me to have attempted to gather any of the Medical news of that great City.

I arrived in Paris on the 9th inst., and since my arrival, my time has been passed in the reception of friends, noting the wonderful changes, in this beautiful City, since my departure two years ago, visiting Hospitals, Medical Societies, &c., &c. I regret to say that I find but little doing here, at present, in the way of medicine, as we are in the midst of the annual vacation—between the summer and winter course of lectures, which commences the first of September, and continues, usually, until the first of November—the only respite of the Faculty, from their arduous labors, during the year. During the vacation, the hospitals are attended by the *agrégés* of the Faculty and the *internes*, or hospital physicians; and as there are but few students in Paris during the two month's vacation, we have but few facilities in the way of hospital or private instruction. The regular winter course, however, will commence on the first November; and in some of the hospitals, perhaps, a few days earlier, and with them the various private courses upon specialities, when the student may study any branch of the medical science that he may fancy, to the very best advantage.

I have attended some one of the various hospitals every day

since my arrival in the City, and in all, find that the application of carbonic acid as a local anæsthetic, as suggested and practiced by Prof. Simpson, of Edinburgh, has considerable favor. Prof. Simpson's first experiments with this agent, as you are apprised, were in painful affections of the uterus, and with marked success; nor did he find the injection of carbonic acid into the bladder of those suffering from neuralgia or inflammation of that organ attended with less happy results. At present, in Paris, this agent is not restricted to any organs or class of diseases, but is indiscriminately applied, as well to the external surface, if there be an abrasion, as a diseased mucous membrane. As a test of the anæsthetic properties of this gas, the following experiment has frequently been made both here and elsewhere: Apply a blister to the finger or any other portion of the body, after vesication, remove the epidermis, and if exposed to the air, there will be more or less pain; if immersed in oxygen gas, the pain will be greatly increased, but, after either, if the denuded surface be exposed to a current of carbonic acid, all pain will instantly cease. This experiment would suggest the importance of this gas in the treatment of burns.

The soothing effect of some poultices to irritable ulcers, and other inflammations, is now supposed to be due to the carbonic acid, set free by the fermentation of these farinaceous compounds. And, again, the agreeable sensation from an effervescing draught in some diseases of the stomach, is accounted for by the contact of the carbonic acid, set free with the diseased mucous membrane of that organ.

Although I have frequently witnessed the application of this gas, both in diseases of the uterus and bladder, yet, I have not, but in one case, been able to follow and note the effect. This was in a young man 24 years of age, in the wards of M. Broca. For two years he has suffered constantly with a chronic inflammation of the bladder. For the past six months, he has been in the hospital, and submitted to the most rational treatment, without the least amelioration of his sufferings; so sensitive has been his bladder during the whole of his illness, that he has been forced to urinate every half hour—the least distension giving him excessive pain. After the first injection of carbonic acid, there was a marked amelioration of all the

symptoms; after the second injection, made twenty-four hours after the first, the amendment was still more perceptible; and after the third, the same interval intervening, he was enabled to retain his urine for four hours, something that had not occurred for two years—has less pain than at any time during the attack; complains only of pain in the course of the urethra, the result, I suppose, of the frequent introduction of the catheter.

To illustrate further the striking effects of this gas, I have translated the following report from the *Gazette Hebdomadaire* of this week:

“Michel Denise, aged fifty years, entered Hôtel Dieu the 26th Sept. 1856. She has not menstruated for two years, since which time she has had an abundant leucorrhœal discharge. Since April last, she has suffered greatly with pain in the left iliac region; the pain has not been constant, but reappeared at short intervals, and with such force that it prevented her occupying one position any length of time, in fact, was so severe that it prevented the possibility of sleep, and greatly affected her appetite. Since the appearance of the pains, she has grown very thin. Upon an examination of her vagina, M. Follin found rather an extensive carcinomatous ulceration of the neck of the uterus. On the 30th of September, he injected into the vagina carbonic acid, and from the moment that the gas reached the neck of the uterus, she affirmed that the pain entirely disappeared. After the injection no treatment, whatever, was instituted, and still there was no return of pain. The patient was up during the day; her appetite returned, and it was evident that her general health was improving. On the 8th of October, she said she had suffered to some extent during the night; another injection was made since which time, she has been entirely free from pain.”

In the same journal there is recorded another case under the care of M. Follin, presenting the same lesions with a like happy result. Whether the above, and like cases on record, are exceptional or isolated, and whether this is like many other remedies, for which much has been claimed—making their noise for to-day, to die to-morrow, time alone must determine. Of one thing, however, I feel pretty sure, that if it will accomplish all that has been claimed for it, which I cannot yet believe, it will prove as great a boon to the physician as chloroform has to the surgeon.

The apparatus for generating this gas is of the most simple character, and in the reach of every physician; and, as there

is not the least danger in its application, all may test its virtues for themselves. The most simple mode of generating and applying it is as follows : Into a common glass bottle, with a large mouth, if convenient, put 6 drachms of tartaric acid, and a solution of 1 ounce of bicarbonate of soda, to 7 ounces of water ; close the bottle with a cork well adapted, through which there passes a tube for conducting the gas from the interior. To make an application to the neck of the uterus, the tube, if elastic, may now be introduced into the vagina. If this is not convenient, or if it is to be thrown into the bladder, attach a hog's bladder to the end of the tube, and after filling it with gas, detach it and secure a catheter to the mouth of the bladder thus distended, and it may be injected either into the vagina, bladder, or rectum.

I noticed, at *La Charité*, a few days ago, a new method of treating effusions of blood, the result of contusions, &c., known as the treatment by *ponctions capillaires*. It appears that at one of the recent meetings of the *Société de Chirurgie*, M. Vollemier presented to that body this new method, affirming that, after quite a number of experiments, he was convinced that it was the best plan of treating such accidents. This new method consists of a number of punctures over the seat of the collection, by means of a needle ; the blood is slowly discharged through these punctures, without the least danger of the entry of air into sack. M. Vollemier has recently used a small exploring trocar instead of the needle, to make the punctures, but impresses the importance of compression of the walls of the tumor, during the time that the canula rests in the sack, to prevent the entrance of air.

He but seldom attempts the removal of the whole of the fluid at one time, but contents himself when operating with the needle, more particularly, to make two or three punctures every day until all is removed. He goes still further, and contends that such punctures are not alone applicable to effusions of blood, but are alike efficacious in the treatment of some varieties of purulent collections, and more particularly abscesses of the lymphatic glands. Of the latter, I have seen one example, and must say, that the result was more satisfactory than by the usual method—a full incision. It was an abscess of one of the inguinal glands. In the same wards, (those of



M. Broca,) I witnessed a puncture of the knee joint with a small exploring trocar, for the removal of what was supposed to be a serous effusion, but which proved to be purulent, the result of acute arthritis. Very nearly all the liquid was removed, to the great relief of the patient. Firm pressure was made over the distended capsule during the time that the cannula remained, to prevent the introduction of air. It is now four days since the puncture, no reaccumulation, and the patient, to all appearances, rapidly recovering.

I attended to-day, for the first time since my arrival, the *Académie de Médecine*, and was much interested in a discussion upon the proper plan to be pursued in the treatment of ovarian dropsy. The discussion grew out of a report of a case operated on by M. Barth; the case, as well as the operation, presenting some peculiarities. The peculiarity of M. Barth's operation, consists in an attempt to keep the cyst constantly in contact with the abdominal walls, by means of two punctures and an elastic tube. The operation was as follows: With a long curved trocar he made a puncture above the pubis, the bladder being previously emptied; after the discharge of a small quantity of liquid, he introduced the trocar in the cannula, and made a second puncture from within outwards, the trocar passing out some three or four inches above the first puncture; withdrawing the trocar a second time, he, by means of a long needle, passed a tube of india rubber through the cannula; the cannula was now withdrawn, leaving the tube in the position occupied by it. Two small holes in that portion of the tube, corresponding with the interior of the cyst, permitted the escape of the liquid and the injection of fluids at will. As a full report of this case would require some pages, I will give in a few words the result:

Nothing unpleasant followed the operation; ten days after iodine was injected—no unpleasant symptoms. For the first month the tumor was gradually reduced in size; after this the discharges became purulent, and the cyst ceased to diminish. Two months after the operation, she left the hospital—the purulent discharge continuing. Ten days after her departure she returned, and in a few minutes after entering the hospital, to the great surprise of every one, she was delivered of a child at five months. Peritonitis and death, in a few days, was the

result. The postmortem revealed a rupture of the sack, but not at one of the openings, as would have been supposed, but at the superior portion of the cyst. The premature delivery was the result of this rupture. The operation had nothing to do with the unpleasant result. I should have stated that the patient was presented to the *Academie* some twenty days after the operation. No one suspecting, for a moment, that she was pregnant.

The discussion which followed was not so much upon the mode of operating, as to whether we should attempt the radical cure by an operation, that is, by the injection of iodine and other irritants.

M. M. Malgaigne, Moreau, Huguier, Cazeaux and Velpeau, entered warmly into the discussion. The discussion is to be continued, and in my next letter I will, at least, give you the position of these distinguished men upon this much vexed question. At present, suffice it to say, that the remarks of M. M. Velpeau and Malgaigne were, notwithstanding, the brilliant statistics of Dr. Atlee, by no means, complimentary to our American surgeons, who have proposed and practiced the extirpation of ovarian tumors.

As ever yours, &c.,

W. F. WESTMORELAND.

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## EXTRACTS FROM THE RECORDS OF THE ATLANTA MEDICAL SOCIETY.

REPORTED BY THE SECRETARY PRO TEM.

Nov. 6th. 1856.

Dr. M. H. Oliver reported a case of coxalgia of some eighteen months standing, that had recently been put upon the internal use of iodide of potassium and sarsaparilla, with the application of tincture of iodine to the hip-joint, under which treatment there had been marked improvement.

During the discussion of the regular question, "Can we have Typhoid Fever with Intermittent Symptoms," Dr. Oliver remarked, that the only case of typhoid fever he had ever treated, manifested marked intermittent symptoms in the commencement, continuing four or five days, then assuming the

ordinary course of continued fever. He was sustained in his opinion as to the character of the disease, by the opinion of several of the prominent physicians of the city.

Dr. Wilson was clearly of the opinion, that we do have typhoid fever occurring in this locality, with the ordinary symptoms of intermittent fever, during the first week, at least so far as a regular freedom from fever at stated periods, and periodical exacerbations—he referred particularly to a case of comparatively recent occurrence, in which he had verified the correctness of his diagnosis, by a postmortem examination. There was a periodical freedom from fever every morning, and a daily exacerbation, with pain in the lumbar region, &c., and the periodical symptoms were altogether so decided, that he had treated the case with quinine, without, however, deriving any benefit from the remedy. These symptoms continued for about six days, and the ordinary continued course of fever then supervened, and with such violence as to have resulted in a fatal termination about the sixteenth day from the commencement of the attack. The postmortem revealed ulceration of Peyer's glands, with perforation of the bowel.

Dr. J. G. Westmoreland remarked, that he had never witnessed a case of typhoid fever with lumbar pain, and believed it to be very unusual; much more rare, even from a persistent recumbent posture, than in other diseases. If the pain in the lumbar region were very decided, he would be inclined to doubt whether a case were really typhoid fever, notwithstanding strong testimony in other particulars, especially if attended with periodical symptoms.

Dr. Westmoreland remarked, however, that he believed that we might have, and do have, distinct periodical symptoms in typhoid fever in its early stages. He had witnessed this in cases occurring in connection with others of a continued character; he also remarked, that no man, in his opinion, could decide, in reference to whether a case is typhoid fever in its commencement, or during the first week, without, what he considered, the *pathognomonic* symptom; tenderness in the region of the medulla oblongata.

Dr. Wilson stated, that he had been *feeling* for this symptom about ten months, without being able to find it uniformly present.

Dr. Coe remarked that, as to whether the disease does present itself under the form of periodicity, or of an intermittent, or remittent character, he was not prepared to decide. The different opinions in the profession as to its cause, the nature of the morbid agent, its locality, the tissue in which it is located, all render it more difficult to decide as to the true nature of the disease ; but that there is frequently a partial remission, if not an entire abatement of the fever every morning, which continues even until evening, is unquestionable, especially in sporadic cases, for five or six days after the commencement of the disease ; and in some instances, at least, we may find it more difficult to form a correct diagnosis during a few of the first days of the disease, than has been supposed by some, for he knew of no pathognomonic symptom of the disease, especially in the forming stage.

It is true, that usually, its mode of access is much more gradual (yet, not always so) than intermittent or remittent fever. We have chills, or at least, chilly sensations, fever, headache, occurring every evening, which are all absent in the forepart of the day. The appearance of the tongue, at this stage, differs but little from that presented in remittent fever ; it is moist, thinly coated, and, in many cases, not even red at the tip or edges ; but in most cases is tremulous when protruded. We also have aching of the back and inferior extremities, which, also occurs in remittent and intermittent fever.

It is very true, that after a few of the first days, typhoid fever becomes well marked, and cannot well be mistaken by any practitioner who is acquainted with his profession. But it is of vast importance to our patient that we distinguish the disease at first, for, if we mistake it for remittent or intermittent fever, and treat it as such, with quinine and calomel, we will not benefit our patient in the least, but do decided injury, and be in great danger of destroying the subject ; whilst on the other hand, if we mistake it for typhoid (the safest of the two), and treat it accordingly, we let our patient lie and suffer, and the repeated excitement allowed to continue, produces local disease, which is not relieved except by a long and tedious process, if it do not in the end prove fatal.

So, if we have remittent or intermittent *typhoid fever*, it is all-important that we should be able to distinguish it from our

common *periodical* fevers, which come under the head of *remittent* or *intermittent* proper. As to the pathognomonic symptom alluded to by Dr. Westmoreland—the tenderness at the juncture of the spine with the occiput—he was not prepared to decide, as his opportunity for investigation had been too limited, since his attention was directed to that point, to enable him to venture any decided opinion. In one well marked case of typhoid fever which he had examined since, he failed to detect the tenderness, which might have been attributable to the period of the disease, or his want of skill in the investigation. He concluded with the remark, that if it could be established that typhoid fever affects, specifically, this portion of the nervous structure, he should be much more favorably disposed to the view entertained by some—that this fever might present periodicity, than he was at present.

Dr. Logan remarked, that he had been very incredulous in reference to periodical symptoms in typhoid fever until recently he had been called to treat several cases, presenting, to a great extent, the ordinary symptoms of periodical fever, for a number of days, in the first stage, which had afterwards, assumed the usual appearance, and pursued the regular course of *continued* fever. He, however, thought we ought to be very cautious how we adopted views, so entirely opposed to the usual doctrine upon this subject, and should be certain of being well fortified, by evidence of a decided character.

Dr. Westmoreland called attention to the fact, that in typhoid fever, we had usually an active perspiration during the fever, without the reduction of excitement, while in periodical fever proper, the perspiration occurred with the subsidence of the fever, constituting a regular *stage*.

The following resolution, offered by Dr. Coe, was adopted by the Society : That the members of this Society be requested to note particularly the symptoms of every case of disease, which they may suppose to bear any resemblance to typhoid fever, and report the same.

[The subject here presented is certainly one of very considerable importance; for, as suggested in the discussion, the character of the *diagnosis in the first stages*, will *radically* affect the treatment, and in all probability, the issue of the case. The writer has been accustomed to treat typhoid fever for a

number of years, previous to a settlement in this city ; and while he has some indistinct recollection of a single case of finally well developed typhoid fever, presenting the usual symptoms of remittent fever, during the first few days of the attack, it is an exceptional case in his experience, until very recently, he has met with some cases, which, so far as the weight of evidence (save a postmortem) can go to establish the nature of the disease, were *decided* to be typhoid fever ; yet, for some days, perhaps a week, the fever was clearly of a periodical character ; not attended by regular chills, or perhaps, an entire intermission, but by a distinct daily remission.

The occasional manifestation of a periodical element, has been recognized in this disease since the publication of Dr. Bartlett's Treatise on Fevers, though we should hardly have been prepared to expect it in a locality where the occurrence of malarious fevers is so rare ; so much so, indeed, that it has been a matter of discussion, among the medical men here, whether they existed at all—that we do, however, occasionally have them originating here is now a settled point.

It is certainly a desideratum to be able to determine with more accuracy, whether a case be really typhoid fever in the *commencement*. It is admitted upon all hands, that there is no special difficulty after the disease has been fully developed. In reference to the diagnostic symptom to which so much importance is attached by Dr. J. G. Westmoreland, we can only remark, that while there may never be a case of typhoid fever without an affection of the medulla oblongata, and the external evidence of that affection, there are disturbances and lesions of that nervous centre without typhoid fever ; and we cannot, therefore, attach the importance to it that he seems to think it deserves—so far at least, as to be able to determine by its presence, that we have the disease under discussion. That this point may be one of those specifically affected in the disease we are not prepared to deny, nor to assert that its discovery is not an advance in pathology, or of practical benefit in the management of this obscure and troublesome affection, but that it deserves to be looked upon as an infallible diagnostic mark, we very much question.—EDITOR.]

## BIBLIOGRAPHICAL.

We have received from the Publishers, Messrs. Blanchard & Lea, of Philadelphia, "The Practical Anatomist; or, The Student's Guide, in the Dissecting-Room. By I. M. Allen, M. D., Late Professor of Anatomy in the Medical Department of Pennsylvania College, &c., &c." This is a work of over 600 pages, with 266 illustrations, the character of which is clearly indicated by its title. From an examination of the work we have no doubt that this is one of the most valuable aids that we have had furnished for the study of Practical Anatomy. The Author remarks that "In aiming to make the book as useful as possible, viewing the Student as a candidate for the Practice of Medicine and Surgery, I have not hesitated to discriminate, to some extent, between different regions and organs in a practical point of view. Hence I have dwelt longer on some points than on others, being governed in this respect partly, by what I conceived to be the relative value and importance of any part or organ, to the Student, and partly by the difficulty which I have observed Students, in the dissecting room, especially beginners, to have in dissecting and understanding them. Thus I have devoted a large share of time and space to the organs contained in the three great splanchnic cavities, to the organs of the special senses, and to such regions as the perineum, the inguinal, the femoral, the anterior part of the neck and the axilla.

Although the space allowed in the original plan of the book, did not admit of my dwelling long on the Medical and Surgical Anatomy, of many parts and regions, I have endeavored to direct the attention of the Student to whatever had a practical bearing, so that he could, by referring to works on Medicine and Surgery, derive full advantage from his dissections. To give merely a *meagre* or *superficial* account of the Medical and Surgical Anatomy of a part, I am satisfied does the Student more harm than good. The work will be found to be valuable, not only to the student in the dissecting-room, but will furnish valuable aid to the physician as a book of reference, in refreshing his memory as to the position and relation of the different parts of the body."

We have received, also, from Messrs. A. S. Barnes & Co., 51 and 53, John Street, New York, the "Hand-book of Inorganic Chemistry for the use of Students. By William Gregory, M. D., F. R. S. E., Professor of Chemistry in the University of Edinburgh and Author of Hand-book of Organic Chemistry." To which, is added, The Physics of Chemistry. By J. Milton Sanders, M. D., L. L. D., Professor of Chemistry in the Eclectic Medical Institute of Cincinnati.

The work seems to have been well gotten up by the publishers, and may be a valuable book, but we must confess that our repugnance to everything bearing the name of *Modern Eclecticism*, is such, that we have had no disposition to look beyond the title page and preface—we have no taste for, or confidence in, the writings of those whose minds are either infatuated by any of the species of quackery, or who, for dishonorable ends, are sailing under false colors; men of this class, we think, should not be trusted, even in the exact sciences. To the publishers we are obliged for the courtesy extended in sending the work, and we are only sorry that they have not sent us a book that we could have aided in circulating.

Since the above was written, we have received "The Hand-book of Organic Chemistry," By the same Author and Editor, from the same publishers, Messrs. A. S. Barnes & Co., 51 and 53, John Street, New York; to which the same remarks apply.

We also find upon our table the Annual Circular of the Medical Department of the University of Louisiana, for the Session of 1856-7. This Institution is located in New Orleans, and has been in successful operation for a number of years. The regular Annual Course of Lectures, commenced on Monday the 17th of November, and will terminate in March, 1857. We learn from the Circular that there were 222 Matriculants, and 65 Graduates in 1855-6, and that the Students of the Class were from Louisiana, Mississippi, Alabama, Texas, Arkansas, Tennessee, Kentucky, Iowa, Missouri, South Carolina, Georgia, Florida, Indiana and France. The Faculty announces to the public the continued prosperity of the Medical College of Louisiana. More than twenty-three hundred names are on the Register of Matriculants. The College is endowed by the State.



*The Sydenham Society, of London.*

This Society was instituted in 1843, with the view of supplying its members with Standard Medical Works. The subscription, constituting a member, is five dollars annually, payable in advance. The following extracts from the Laws will explain the objects of the Society :

I. The Society is instituted for the purpose of meeting certain acknowledged deficiencies in existing means for diffusing medical literature, which are not likely to be supplied by the efforts of individuals, and shall be called the "SYDENHAM SOCIETY."

II. The Society will carry its objects into effect by a succession of publications, embracing, among others: 1. Reprints of standard English works, which are rare or expensive; 2. Miscellaneous selections from the ancient and from the earlier modern authors, reprinted or translated; 3. Digests of the works of old and voluminous authors, British and foreign, with occasional biographical and bibliographical notices; 4. Translations of the Greek and Latin medical authors, and of works in the Arabic and other Eastern tongues, accompanied, when it is thought desirable, by the original text; 5. Translations of recent foreign works of merit; 6. Original works of merit, which might prove valuable as books of reference, but which would not otherwise be published, from the slender chance of their meeting with a remunerating sale—such as bibliographies, alphabetical and digested indexes to voluminous periodical publications, &c.

Three volumes, handsomely bound in a uniform manner in cloth, gilt edged, are usually issued in the year.

List of the Society's Works, of which copies are still on hand, and from which new members, subscribing for the current year, may make a selection, on payment of an additional five dollars for any three volumes, with the exception of those to which an asterisk is affixed. Those to which an asterisk is affixed, or any other single volume, may be had for \$2 50 per volume.

Sydenhami Opera Omnia, 1 vol.; Hasse's Pathological Anatomy, 1 vol.; Rhazes on the Smallpox and Measles, 1 vol.; The Works of Hewson, portrait and plates, 1 vol.; Dupuytren's Lectures on Diseases and Injuries of Bones, 1 vol.; Dupuytren on Lesions of the Vascular System, &c., 1 vol.; Memoirs of the French Academy of Surgery, 1 vol.; Feuchtersleben's Medical Psychology, 1 vol.; Microscopical Researches of Schwann and Schleiden, 1 vol., plates; the Works of W. Harvey, M. D., 1 vol.; the Genuine Works of Hippocrates, 2 vols.; Essays on Puerperal Fever, and other Diseases Peculiar to Women, 1 vol.; the Works of Sydenham, translated from the Latin, 2 vols.; Unzer and Prochaska on the Nervous System, 1 vol.; Annals of Influenza, 1 vol.; Romberg on Diseases of the Nervous System, 2 vols.; Kölliker's Manual of Human Histology, 2 vols., wood cuts; \*Rokitansky's Pathological Anatomy, complete in 4 vols.; \*Hunter on the Gravid Uterus, 1 vol. folio, 34 plates, with descriptive letter-press; Wedl's Pathological Histology, 1 vol., wood cuts; Oesterlen's Medical Logic, 1 vol.; Velpeau on Diseases of the Breast, 1 vol.; the Works of Aretæus, Greek and English, 1 vol.

RICHARD J. DUNGLISON, M. D.,  
Hon. Local Secretary for Philadelphia.

*Medical Miscellanies.*

William Buckland, D. D., the celebrated geologist and Dean of Westminster, died on the 7th August, at Clapham, Eng. He was appointed to the Deanery of Westminster by Sir Robert Peel, in 1845. It is stated that shortly after his appointment, he became subjected to "the last infirmity of noble minds"—his intellect gave way. In November, 1846, it was our privilege to listen to his preaching, and sure we are that at that period he manifested no symptoms of the disease to which he afterwards became a victim.—The Library of the Royal College of Surgeons, England, contains over 30,000 volumes.—A new edition (the 7th) of Druitt's Surgery has recently been published in London.—According to the Boston Medical and Surgical Journal, Sept. 11th, the health, so long and seriously impaired, of Dr. J. Mason Warren, will soon be re-established. At present he meets his patients at his usual consultation hours, and has partially resumed his duties at the Massachusetts General Hospital. The Warrens are names inseparably associated with American Surgery.

Dr. Jas. Dubois, of New Utrecht, L. I., has fallen a victim to the yellow fever, which is prevailing in that vicinity. At the commencement of the epidemic, Dr. D. was advised by his friends to leave for a more healthy location, but he replied that it was his duty to remain, and not to desert the inhabitants in their hour of affliction. Like a true soldier, he died at the post of duty.

A quack in England has recently been convicted of manslaughter in causing the death of a patient by administering lobelia-inflata in five-grain doses. According to a statement made by Dr. Letheby, in 1853, Professor of Chemistry in the London Hospital, no less than thirteen cases of poisoning had occurred from this drug within the three or four preceding years, and in six of these a coroner's jury brought in a verdict of manslaughter. In the recent trial, the prisoner was sentenced to three months' imprisonment.

Dr. J. V. C. Smith, for many years editor of the Boston Medical and Surgical Journal, is about to establish a new journal, to advocate "more liberal principles."

In Mr. Marson's petition to the House of Commons on the Vaccination Bill, 1856, he mentions as an example of what can be done by efficient vaccination, the fact, that not one of the nurses or servants of the London Small-Pox Hospital has had small-pox for the last twenty years. They had all been either vaccinated or re-vaccinated at the commencement of their service.

Dr. H. D. Bulkley, formerly editor of the N. Y. Medical Times, has become associated with Drs. Purple and Smith, of the N. Y. Journal of Medicine, which is one of our best medical periodicals, and but too little known at the West. By this union of the editorial corps, both journals become consolidated. We can cordially recommend the N. Y. Journal to our readers.—*Western Lancet.*

*Poisoning from swallowing Chloroform.*

The *Philadelphia Medical Examiner* contains an interesting case of death following the ingestion of about one ounce and a half of chloroform, diluted with about the same quantity of water. The patient was an intemperate woman, who swallowed the liquid by mistake, supposing it to be sweet spirit of nitre. The first symptoms were those of intoxication followed by insensibility, stertorous breathing, slow and feeble pulse, and great contraction of the pupils. She lived for about thirty-six hours, and died asphyxiated, having recovered her senses for several hours before death. The stomach was paler than usual, except in streaks a quarter of an inch in width, from which it was inferred that the organ had been thrown into folds by the irritation of the chloroform, so that only a portion of its surface had been acted on. The mucous membrane was much softened.—*Boston Med. and Surg. Journal.*

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*Etherization in Puerperal Convulsions.*

Dr. Griscom reports to the Philadelphia College of Physicians a case of puerperal convulsions occurring in a corpulent young woman, pregnant with her second child. She was suffering under general anasarca swelling, and experienced vertigo occasionally. While dressing her hair, she fell down in violent apoplectic convulsions. Her pulse was full and rapid, and being unable to bleed her, Dr. G. took sixteen ounces of blood from her head by cups, and the same quantity by leeches. There was no evidence of labor having begun. As the patient still remained unconscious, and the convulsions were recurring with fearful violence, chloroform was used as a rubefacient to the spine and epigastrium, and ether given by inhalation. After its exhibition the convulsions became less and less violent, labor set in, and a living child was born. The mother recovered.—*Medical and Surgical Reporter.*

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*Mode of Testing the Translucency of Hydrocele.*

As ordinarily employed, by placing a candle on one side of the tumor, and excluding the passage of the light laterally by means of the hand, it is, at best, a clumsy proceeding, and liable to errors. I have found the stethoscope much more useful, as a means of excluding the diffused light, and by applying the eye to its expanded bell-shaped portion—the ear-piece being firmly placed upon the scrotum, held in a tense condition—we can even map out the state of the parts with tolerable accuracy, if the contained fluid be of ordinary character, and detect the condition of the testicle by the opacity it produces, especially when it occupies any unusual locality, as the front or sides of the scrotum, or is adherent from inflammation after previous tapplings. We can employ either a lighted candle or bright sunlight, as our best means of obtaining the requisite illumination; but even in diffused daylight I have succeeded very well in the manner I mention.—Dr. W. FRAZER, in *Dublin Hospital Gazette*.

*Spender's Chalk Ointment in Ulcers of the Leg.*

Dr. Patterson has collected 125 cases of chronic non-specific ulcers of the leg, in which, under this mode of treatment, the cure has been rapid and complete. The following formula he prefers: R. *Cretæ preparatæ*, lbiv.; *adipis suilli*, lbi.; *olei olivæ*, oz.iis. Having heated the oil and lard, add gradually the chalk, finely powdered.

The ointment and a bandage being once applied, it is left until the cicatrix forms and becomes firm.—*Edinburgh Medical Journal*.

## RECEIPTS.

Jos. Thweatt, Ga., 2d vol.; E. A. Leggett, Ga., 2d vol.; A. S. Fowler, Ga., 1st vol.; H. J. Forbes, Tenn., 2d vol.; Hayden Coe, Ga., 1st vol.; C. P. Brown, Ga., 2d vol.; M. Thomson, Ala., 2d vol.; W. A. Thomson, Ala., 2d vol.; A. B. Wallace, Ga., 2d vol.; J. E. G. Terrill, Ga., 2d vol.; W. D. Hall, Ala., 1st vol.; Lawrence Smith, Ala., 1st vol.; W. F. Hodnet, Ala., 1st vol.; S. G. Hitchcock, Ga., 1st vol.; Hubert & Culver, Ga., 1st vol.; D. R. Leach, Tenn., 1st vol.; Thos. S. Powell, Ga., 1st vol.; L. H. Jordan, Ga., 1st vol.; B. O. Jones, Ga., 2d vol.

## ERRATA.

October Number, Article on Small Pox, by N. F. Powers, M. D., on page 77, 7th line, read "clapses" instead of "classes;" page 77, 9th line, 3d paragraph, there should be a parenthesis (as in the loins, head, bones, and muscles); page 77, last line 3d paragraph, "a dark fur covers it and its papillæ;" page 78, 9th line, 3d paragraph, "The fluid is changed in its serosity;" page 78, 14th line, 3d paragraph, "anæmic" instead of "anermic;" page 78, last line 3d paragraph, "and are stimulated" when necessary; page 78, last line on the page, "Hager's Plagues;" page 79, 1st page, "seen on the cornea of the eye;" page 80, 11th line 2d paragraph, "difficulty in diagnosing;" page 80, 2d line, 4th paragraph, "There is a great variety;" page 81, 2d line, "can not be seen in other diseases;" page 81, 4th line, "in the last stages of pregnancy, or in the very old;" page 81, 5th line, "as when complicated with diffused hemorrhage;" page 81, 14th line of the letter, "soon after it made its," &c.

[ARTICLE TO BE CONTINUED.]

# A T L A N T A

## Medical and Surgical Journal.

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VOL. II.]

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### ORIGINAL COMMUNICATIONS.

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*Fœticide.* An Essay by J. BORING, M. D., Professor Obstetrics, &c., Atlanta Medical College; read before the Atlanta Medical Society, and published by that body.

In the selection of a subject for discussion on the present occasion, I have been governed by a desire for the advancement of medical science, and sound morality.

Fœticide has been chosen from a settled conviction that its nature and importance are not generally appreciated by mankind, and that some method should be adopted by which public attention and investigation may be had.

The opinion, so long and generally entertained, that the *fœtus* in utero *becomes* a living being at birth, or, at least, at the time of "quickenings," is, in my judgment, based upon profound error, and productive of consequences the most painful and revolting to the enlightened Christian mind.

It has, in innumerable instances, lead the unsuspecting mother to the horrid crime of shedding the blood of her own innocent offspring, and made her husband accessory to the unnatural cruelty.

It has presented an open door of escape from punitive justice, to the multitudes of fallen women, whose passions and foul commerce have subjected them to illegal pregnancy.

It has covered the depravity of scores of those in what is called "high life," and who, but for the hope of escape from exposure by means of criminal abortion, would probably never have fallen by the snares of the seducer.

In few words, it has conduced to evil, and only to evil, in that it has served to render illicit intercourse of the sexes both easy and comparatively safe from public scrutiny, while, at the same time, it has lowered the estimate of human life, and obscured the turpitude of murder.

It strikes at the very foundations of society, is reckless of virtue, and tends, in all its influences, to the destruction of conjugal integrity.

Every member of the profession knows with what apparent confidence and boldness, not the unfortunate only, who have been deceived and ensnared by the seducer, ask to be relieved from the consequences of their illegal commerce, by professional skill in superinducing abortion, but, that the virtuous and the intelligent wife and mother seek, by the adoption of the same measures, to escape the pangs of parturition, and the seclusion of the season of nursing.

Do these last know, does the physician who interposes his skill remember, that the thing proposed is cold, deliberate murder?

That there are those who recklessly resort to abortion to cover their depravity, and that there are monsters in human form, (they can hardly be regarded as *human*,) wearing, most unfortunately, the title of M. D., who, *for money*, will commit the atrocious crime, is too manifest to admit of a question; but, that very many are lead into it by ignorance of its nature and magnitude, is firmly believed. It cannot be, that the multitudes of women who are wives and mothers, and men who are husbands and fathers, who adopt this mode of evading the results of the laws by which they are bound together, do so understandingly.

They do not, as is certainly true, believe themselves murderers, and that of their own offspring. But, that every abortion induced by such causes, and prompted by such motives, is, in the sight of God, murder *out right*, seems to me not to admit of the slightest doubt.

It is unnecessary to adduce evidence of the fact that the destruction of the fœtus in utero has not been, and is not now regarded as murder, since it is true, that England and the United States, the most enlightened nations of the earth, by express statutes, only hold it to be a "high misdemeanor;"

and even *Georgia*, our own State of boasted wisdom and virtue, is found in the same category.

Is it not singular enough that one of our statutes should define murder to be "the unlawful killing of a human being in the peace of the State, with malice afore-thought, either implied or express," and that another should define the cold blooded, deliberate destruction of the fœtus in utero, to be only "a high misdemeanor?" If I am not wholly mistaken, it will be seen that, of all the varieties of murder, that of the embryonic human being is the most atrocious and indefensible. It is a wanton, unprovoked and cruel deprivation of a human being, of the existence which God alone gave, and can of right, take away, and that being is not only inoffensive but utterly helpless.

The doctrine which I hold, and now propose to establish is, that from the moment of the fecundation of an ovum, it is, in every essential sense, a living, self-sustaining, and self-developing being, entitled to protection in its possessions, and that whatever it may become, physically, mentally, and spiritually, *in utero*, or *extra-utero*, is, by growth and development of the original, and not by the addition of *new* materials, or attributes, and, therefore, its destruction, its wanton destruction, is alike murder, at any and every stage of its existence; and no matter whether the killing is by means of a rifle ball, a bowie-knife, a dose of ergot, or the introduction of a bougie into the uterus—the means employed, and the time chosen, to perpetuate the deed, can never change its turpitude—it is *murder still*.

Before introducing proof in support of this view, it will not be wholly irrelevant, to refer briefly to some of the numerous doctrines which have been, and are still held, by those whose position and practice are here controverted, especially, as the doing so will serve to demonstrate the folly of an attempt to settle upon some period after fecundation, at which the ovum takes on the attributes of a living being.

On this subject, Beck, in his work on Medical Jurisprudence, has the following judicious remarks: "The ancients were by far the most extravagant in their notions on this subject. The same fundamental error, however, pervaded all their doctrines. They believed that the sentient and vital principle

was not infused into the foetus until sometime after conception had taken place. It is not surprising that the exact time at which this union is effected, could never be satisfactorily settled by them. According to Hippocrates, the male foetus became animated in thirty days after conception, while the female required forty-two.

"The stoics believed that the soul was not united to the body, before the act of respiration, and consequently, that the foetus was inanimate during the whole period of uterogestation.

"This doctrine prevailed until the reigns of Antoneus and Sevenses, when it gave way to the more popular sentiments of the sect of the Academy, who maintained that the foetus became animated at a certain period of gestation.

"The common law of the Church of Rome also distinguished between the animate and inanimate foetus, and punished the destruction of the former with the same severity as that of homicide.

"Galen considers the animation of the foetus to take place on the fortieth day after conception; at the same time that he supposed the foetus to become organized.

"Others believed shorter periods sufficient, and, accordingly, three days, and seven, have respectively had their advocates.

"Another contends that eighty days are requisite for the animation of the female, while only forty are necessary for the male,

"Some advocate forty days, as sufficient for both.

"Others, again, make a distinction between the imperfect embryo and the perfectly formed foetus, and consider abortion of the latter as a crime deserving the same punishment as homicide.

"Amidst these discordant sentiments, Zachias offers himself as a mediator, and proposes sixty days as the limit, and recommends that any one who should cause an abortion after that period, whether of male or female, should be punished for homicide."

From the foregoing, it is obvious that the confusion by which the subject has been constantly encompassed, has arisen from the attempt to fix upon some period, subsequent to conception or fecundation, at which vitality is communicated to the foetus in utero, and there being, manifestly, no such pe-



riod, a satisfactory settlement of the question as to *what* time it occurs, can never be had. The whole attempt is an egregious blunder, having for its origin erroneous physiological doctrines.

It is a matter of no ordinary surprise, that both England and this country should have adopted principles so manifestly absurd and dangerous to the good of society, and thus perpetuate one of the greatest errors of Pagan nations and Romanists, and our surprise is enhanced by the considerations of life, and the tremendous responsibilities attending its criminal destruction.

On this subject, Beck says, "The absurdity of the principles on which these distinctions are founded, is of easy demonstration. The fœtus, previous to the time of quickening, must be either dead or alive. Now, that it is not the former, is most evident from neither putrefaction nor decomposition taking place, which would be the inevitable consequences of an extinction of the vital principle.

"To say that the connexion with the mother prevents this, is wholly untenable; facts are opposed to it. Fœtuses do actually die in the uterus before quickening, and then all the signs of death are present. The embryo, therefore, before that crisis, must be in a state different from that of death: and this can be no other than life."

But, the view of the case which I would present, and which appears to me the only rational one, is, that the fecundated or fertilized ovum is from the moment of its fecundation, a *bona fide human being in embryo*, and henceforward, in process of development, identically the same from its embryonic state, through uterogestation, at birth, during lactation, dentition, and manhood.

That this view is correct, will, it is believed, be sustained by all the reliable works on the subject of Physiology. Let us examine a few, only, of the most approved European and American authors.

Richerand says, "Blood is perceived about the seventeenth day after conception, together with the pulsation of the heart, and not long after the different organs have commenced their development."

Blumenbach and Magendie confirm this statement

Mauriceau states that he "saw a foetus of about ten weeks, that was alive, move its arms and legs, and open its mouth."

Carpenter remarks, that "a change in the type of the circulating system of the foetus, takes place at a very early period. At about the fourth week, in the human embryo, a septum begins to be formed in the ventricle; and by the end of the eighth week it is completed."

Dr. Dunglinson's observations are to the same effect. He says, "In the third month, the heart beats forcibly."

These authors clearly establish the fact of the vitality of the ovum as early as the seventeenth day of pregnancy, and thence onward, and consequently refute the idea of a "*communication*" of life at a subsequent period of utero gestation.

But, it may be asked, "is the fecundated ovum the very being to be hereafter developed?"

Let those who have investigated the subject answer.

"The Foetus of three to four weeks, has the form of a serpent—its length from three to five lines; its head indicated by a swelling; caudal extremity (which is seen a white line, indicating the continuance of the medulla spinallis) slender, and terminating in the umbilical cord; the mouth indicated by a cleft; the members begin to appear as nipple-like protuberances; the line occupies the whole abdomen; the bladder is very large, &c."—*Carpenter*.

"From the time of the first evidence of impregnation to the fifteenth day, the product of conception appears only as a gelatinous, semi-transparent, flocculent mass, of grayish color, liquifying promptly, and presenting no distinct formation, even by the aid of a microscope. At thirty days it has the size of a large ant, according to Aristotle, or of a barley-corn, according to Burton. Baudalocque, however, observes that it is not larger than the malleus of the tympanum. Its length varies from three to five lines.

"At six or seven weeks its length is almost ten lines. The form and lineaments of the principal organs, and the places from which the members are to arise, can now be observed, and it is equal in size to a small bee.

"At this time, also, the fluid contained in the membranes, is much heavier than the embryo. At two months, the length is about two inches, and its weight nearly two ounces. All

the parts are perfectly distinct, and many points of ossification, are observed in the head, trunk and members. Sometimes the male sex can be distinguished.

"At the third month it is about three and a half inches long, and between two and three ounces in weight. The nose and mouth are formed, and the features of the face become more distinct. The eyes are shut, and the eyelids adhere together—the head is longer, and heavier than the rest of the body—the umbilical cord is formed—the genitals are distinct—the penis, &c., are relatively very large—nymphæ are projecting, and the labia very thick.

"At the fourth month the fœtus is from five to six inches long, and weighs from four to five ounces. The external parts develop themselves, with the exception of the hair and nails.

\* \* \* During the fifth month the motions are felt by the mother. The length is from seven to nine inches, and the weight from nine to ten ounces. The brain is pulpy, and destitute of circumvolutions, or furrows, &c."—*Beck*.

"Haighton, in experimenting on rabbits, could not detect no change before the sixth day, and the fœtus was not perceptible until the tenth.

"In the case related by Sir Everard Home, to which we have so frequently referred, the embryo was perceptible under the microscope of Mr. Bauer, and although its weight did not probably exceed a grain, the future situation of the brain and spinal marrow was apparent. From this period, and especially after the fifteenth day, the ovule can be separated into two distinct sets of parts—the dependencies of the fœtus, and the fœtus itself. These, in the course of pregnancy, become more and more readily separable."

"From the moment of a fecundating copulation, the minute matters furnished, by both sexes, when commingled, commence the work of forming the embryo. For a short time, they find in the ovum the necessary nutriment, and subsequently obtain it from the uterus.

"The mode in which this action is accomplished is as mysterious as the essence of generation itself. Where the impregnated ovum is first seen, it seems to be an amorphous, gelatinous mass, in which no distinct organs are perceptible. In a short time, however, the brain and spinal marrow, and

blood vessels make their appearance, but which of these is first developed is undecided.

“Sir Everard Home, from his observations of the chick in ovo, as well as from microscopic appearances presented by the ovum, in the case of the female who died on the seventh or eighth day after impregnation, in which a rudimental brain and spinal marrow were perceptible, decides that the parts first found, bear a resemblance to brain; and that the hear and arteries are produced in consequence of the brain having been established.

“The ovule does not reach the uterus until towards the termination of a week after conception. On the seventh or eighth day it has the appearance referred to, in the case so often cited from Sir Everard Home; the future situations of the brain and spinal marrow being recognisable with the aid of a powerful microscope. On the thirteenth or fourteenth day, according to Maygries, the ovum is perceptible in the uterus, and of about the size of a pea; containing a turbid fluid, in the midst of which an opaque point is suspended—*punctum saliens*. The weight of this has been valued at about a grain.

“On the twenty-first day, the embryo appears under the shape of a large ant, according to Aristotle, etc.

“Thus, man himself, in succession, passes through a great variety of forms, from the condition of a simple cell; these forms, merging by degrees into one another—the form of the serpent, of the fish, of the bird—and this not only as regards the entire system in the aggregate, but also as regards each one of its constituent mechanisms—the nervous system, the circulatory, the digestive. Now, on the passage onward, these forms are to be regarded, as has been well expressed—each one as the scaffolding by which the next is built—and just as man, in his embryonic transit, presents these successive aspects on a small scale, so does the entire animal series present them in the world, on the great scale. \* \* \*

“Every living being, therefore, springs from a germ which will develop itself into the likeness of its parent, provided it is submitted to the same conditions through which its parents passed. \* \* \* \*

“During the development of any new organism, the new

parts uniformly arise from the old ones; they are not built from foreign materials depositing themselves upon new centres, but are educed by the unfolding, enlarging and modeling of parts already existing. An organism is not developed as an enlarged house, by building part to part, but it all expands from one common or simple centre. \* \* \* \*

“At the stage we are now considering, the nutrition of the embryo is conducted in a special, but very temporary way. The yolk of the ovum has no stock of food to maintain the nutrition processes beyond the brief space which transpires in the passage through the fallopian tube. The duty of nutrition is, at this moment, assumed by the villous coat of the chorion, which absorbs fluid exuding from the uterine decidua, very much after the manner of the spongioles of the plant; but almost immediately the necessity arises of diverting more directly the albuminoid material to the quickly growing embryo from the yolk-bag, to which it would have gone, and this new destination implies the introduction of new channels of transport, which, under the form of a vascular apparatus, are now provided.

“About the close of the second month, a proper vascular apparatus, for the combined purposes of nutrition, secretion, and respiration, makes its appearance; it is the placenta. \* \*. From the description which has thus been given, it may be gathered, that up to the period of birth, three distinct types of nutrition have been followed. They may, with sufficient accuracy, be designated—1st, yolk nutrition; 2d, tuft nutrition; 3d, placental nutrition. To these, may be added the two followed at a later period—4th, lactation, and after the dental mechanism is supplied; 5th, the diet of mature life. \* \*.

“It has been shown, that at one period, nutrition is solely at the expense of the yolk of the ovum, which is appropriated by a simple surface—imbibition; and that this, in due time, is succeeded by what has been designated tuft nutrition. At a later period, this mode, in its turn, is replaced by another, depending on a vascular arrangement—the placenta. For a considerable period after birth, a fourth system is relied on—nourishment by milk; and it is only by degrees, when the necessary changes have been made in the digestive mechanism, the teeth being cut, that the final mode of nutrition is assumed.”  
—*Draper*.

Thus, from the united testimony of these distinguished authors, it is seen—first, that the identical ovum of fecundation, is that which, in its development, is the embryo of fifteen days, of thirty days, of two months, of three or four months, the foetus in utero, at five months, at term of gestation, in parturition, through lactation, dentition, &c., &c. It is impossible to be mistaken at this point. But, secondly, it is as clearly shown that vitality is coëxistent with fecundation, and that there is, and, in the nature of the case, can be, no point of time afterwards for the *communication* of vitality. Thirdly, that the fecundated ovum is not only the embryonic man, already vital, but it is, in an important sense, an independent, self-existent being, that is having in itself the materials for development, being actually separated from the mother, as well as from the father, though maintaining a connexion in utero by the vascular arrangement repeatedly referred to; there is, *really*, as has been fully demonstrated, no actual attachment of the placenta to the uterus. Fourthly—that from the moment of fecundation, the ovum breaks from subjection to the influence of both parents, and instantly begins the work of its own development, which is to continue through a series of changes up to manhood, but not to the destruction of identity of being and attributes.

I ask, then, where, and how, shall the points of time be fixed, at which this being may, and may not, be destroyed? Is it not the same at every period of existence, in so far as it alone is considered? It is only in a relative point of view, that the murder of the adult differs from that of the foetus in utero. As to the *nature* of the crime, there can be no difference in the sight of God.

But, I cannot consent to conclude this subject before introducing a further extract from the pen of Prof. Draper, who uses the following beautiful and strong language in summing up his views of this matter :

“Perhaps, in some age hereafter, Physiology will find herself sufficiently advanced to offer her opinion on this profound topic, (the immortality of the soul,) for I cannot think that God has left us without a witness in this matter, even in the structure and development of the body itself. From the moment that we see the first traces of the nervous mechanism

lying in the primitive groove, we recognise the subordination of every other part to that mechanism.

“For it, and because of it, are introduced the digestive, the circulatory, the secretory, the respiratory apparatus. They are merely its ministers. And fastening our attention on the course which it pursues, we see that it is at once a course of concentration and development.

“The special, is at each instant, coming out of the more general, and from the beginning to the end, psychical development. The germinal membrane is cast away as soon as a stomach can be prepared—aquatic respiration ceases as soon as aerial can be maintained. The scaffolding that was of use at one moment, is thrown aside as soon as a new elevation is reached. The germ, the embryo, the infant, are only successive points in a progress, which at instant displays, this casting away the means that have been used, as soon as they are done with. That is the style in which the work is carried on. The principle which obscurely animated the germ, is the same which, in a higher way, animates the embryo, and this again, is the same which, in a more exalted condition, animates the infant and the man. The cloudy speck which ushers in the phantasmagoria of life, expands, as the Great Artist directs, until every lineament has become visible.

“That active Agent, which was first laid in a fold of the germinal membrane, was not annihilated when its type of life was changed to placental, and, therefore, aquatic life. It withstood the shock, when again, after a due season, it was suddenly made to breathe the air. Arrived at the mature condition, there is not in its companion body, a single particle that was present at birth. All has changed. And, what is still more important, not only has there been this interstitial removal, but in succession, the very nature of every one of its organs has changed. It is needless now to repeat how many different systems of nutrition it has depended on—how many sorts of stomachs in succession it has had—how it has carried on its circulation with a heart; with a heart of one cavity, and finally with one of four. Through, all these losses and changes, the immaterial principle has passed unscathed, and even gathering strength.

“In the broadest manner that a fact can be set forth, we see, herein, the complete subordination of structure, and the enduring character of spirit.”

## ARTICLE II.

*A Case of Gaseous Colic.* By THOS. S. DENNY, M. D.

In one of the recent numbers of your Journal I observed a case of "Gaseous Colic," reported by Dr. W. T. Grant of Wrightsboro'.

I recollect a case somewhat similar, though more violent, which occurred in my practice sometime since.

The patient fell as suddenly as if from an attack of apoplexy, which resulted, as he afterwards informed me, from the extreme intensity of the pain.

I saw him immediately after the attack; he was nearly insensible, and it was with difficulty that the pulse could be perceived at the wrist. I immediately administered a strong dose of brandy, laudanum and ess. menth. pip. The effect was almost instantaneous—an immense quantity of wind was discharged from the stomach, which afforded, of course, instant relief. The pain, however, recurred in about half an hour, and required one or two more doses of the same kind, together with the warm bath, (coxluxævium,) to complete the cure.

This case was accompanied, on the recurrence of the pain, and I presume on the first attack, likewise, by a violent spasmodic erection of the penis, adding much to the suffering of the patient. Over this latter symptom the warm bath seemed to exercise almost magical effect; the patient slept immediately after its use, and was as well as usual the next morning, with the exception of some debility, natural after such a violent excitement of the system.

As to the *cause* in this instance, I am now at a loss, if I was acquainted with it at the time.



## S E L E C T I O N S .

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From Proceedings of American Pharmaceutical Association.

*On Effervescing Powders.* By JNO. M. MAISCH, of Philadelphia.

Effervescing powders are used on account of the carbonic acid in gaseous state which is generated as soon as they are thrown into water to dissolve. The carbonic acid is highly esteemed for its agreeable refrigerance, or it is employed to mask to a certain extent the taste of other medicines. The generation of a carbonic acid is effected by the mutual decomposition of a carbonate with a vegetable acid or an acid salt. Of the carbonates used, the preference is usually given to the bicarbonate of potassa or soda, seldom only the officinal carbonate of magnesia or monocarbonate of soda are employed; carbonate of potassa is entirely unfit to enter into such a combination, owing to its deliquescence.

Among the acids, recourse is had to the tartaric and citric, they being the only two officinal acids suitable for such a preparation; sometimes they are replaced by bitartrate of potassa, the object of which is to have the evolution of carbonic acid going on in the stomach.

In the United States and England, the carbonate and the acid are usually kept in two separate papers, distinguished by their blue and white color, while on the continent of Europe, for its greater convenience, a mixture of the two is habitually employed and is even officinal in most of the continental Pharmacopœias.

The U. S. Pharmacopœia has no officinal formula for any of these powders; however it is customary for the apothecary to prepare two different kinds, one under the name of "*soda powders*," which shall contain for one dose 30 grains of bicarbonate of soda in a blue paper, and 25 grains of tartaric acid in a white one. The "*Seidlitz powders*," intended for a slight laxative, require 2 drachms of tartrate of soda and potassa with 10 grains of bicarbonate of soda in a blue, and 30 grains of tartaric acid in a white paper. These powders became officinal in the Prussian Pharmacopœia under the name of English effervescing powders, (*Pulvis aerophorus Anglicus*) and are put up in the greatest part of Europe in accordance with this formula. It has been proposed by Dr. Mohr to substitute tartrate of soda for Rochelle salt, from which tartaric acid precipitates cream of tartar. Sometimes, especially in France, where such formula have originated and were published, the Rochelle salt is partly or wholly replaced by sulphate of soda, and sulphate of magnesia, and the powders thus prepared indiscriminately sold under the name of "*poudre de Seidlitz*," from which they chiefly differ by their bitter taste, the aperient properties being about alike. If these powders are put up in an air-dry state, they keep admirably well for any length of time. Of the British Pharmacopœias, the Edinburgh and Dublin give directions for similar preparations under the name of *pulveres effervescentes citrati*, which are made of citric, instead of tartaric acid. Under the name of simple effervescing

vescing or Seltzer powder, Dorvault directs 4 grammes (61.7 grs.) of bicarbonate of soda in a blue, and the same quantity of tartaric acid in a white paper, which, when dissolved in a wine bottle full of water containing  $1\frac{1}{2}$  or 2 oz. of syrup of currants or lemon, form a very refreshing drink. There are many similar formulæ for "effervescing lemonade," usually consisting of bicarbonate of soda, which for its cheapness is preferred to the potassa salt, mixed, with a certain quantity of sugar, flavored with oil of lemon in one paper, and of tartaric or citric acid done up in another one. The chief object in making such powders is to obtain their refrigerent qualities, and the acid is therefore taken somewhat in excess to assure of the entire decomposition of the carbonate and to procure a quantity of an acid salt, either bitartrate or bicitrate, which by its agreeable acidulous taste adds much to the pleasant and refreshing properties. Sometimes, however, the physician desires an ant-acid effect at the same time with the refrigerant action of the carbonic acid, and increases the quantity of the alkaline carbonate sometimes far beyond the power of saturation of the acid employed.

An effervescing powder is also occasionally made, consisting of bicarbonate of ammonia, and of citric acid, and thus forms a pleasant substitute for the solution of citrate of ammonia of the London College, inasmuch as with each dose beside the ammonia, a corresponding quantity of carbonic acid is administered; 20 grains of crystallized citric acid will saturate 18 grains of the bicarbonate of ammonia, the quantity of which, however, may be enlarged if a more decided action of the ammonia is wanted.

Sometimes, though as yet not very often, if Seidlitz powders are excepted, effervescing powders are used to cover the unpleasant taste of some medicines; in this view they are mostly used in connection with Rochelle, Epsom, and Glauber's salt, the bitterness of which salt is to a certain degree masked, particularly if taken in connection with lemon syrup. Meirieu has proposed to administer sulphate of quinine in this manner, by mixing 1 decigramme of it (1.5 grains) with 1 gramme of tartaric acid, and in another paper 1.2 grammes of bicarbonate of soda and 8 grammes sugar; the quantity of the acid just suffices to convert the soda into the neutral tartrate, and to render the quinine easily soluble, which is intended to be taken with its bitterness masked by the sugar and the evolved carbonic acid. A ferruginous effervescing powder has been proposed by Colombat, and the formula for it published by Dorvault. The powders are made by mixing 2 grms. (grs. 30.87) sulphate of iron, 6 grms. (grs. 92.60) tartaric acid and 12 grms. (3 drachms) sugar, and dividing the mixture into 12 powders, which are done up in white paper; each of the blue papers contains 5 grs. of bicarbonate of soda and 15 grs. of sugar. A reaction at first takes place between the iron and soda salt, resulting in some sulphate of soda and bicarbonate of the protoxide of iron, which is decomposed together with the rest of the bicarbonate of soda by the tartaric acid; the acid is just within the fraction of not quite 2 grains for the 12 powders, sufficient to produce tartrate of the protoxide of iron and bitartrate of soda. If the assertion of many practitioners be correct, that iron exhibits the most useful and reliable action in the animal body when administered in the state of protoxide, the above prescription might perhaps be found very beneficial and claim the attention of physicians. Tartrate of protoxide of iron is but little soluble in water,

and it might perhaps be thought objectionable on that account; it remains to be seen, however, whether bitartrate of soda, or the carbonic acid does not act as a solvent, or whether the digestive liquids do not easily decompose it, so as to assimilate the iron. If the pure sulphate of the protoxide is mixed with tartaric acid, the mixture keeps admirably well, so far at least as may be judged from the color, and in making such an effervescing draught, the iron will consequently reach the stomach before it can be oxydized to sequioxide by the influence of the atmosphere.

In the preceding I have taken a cursory view of the various kinds of those effervescing powders, which are put up with the acid and the carbonate in different parcels, and will now proceed to the principal object of this paper, that of drawing attention to that very convenient form of the same kind of powders, which differ from the former in containing all the materials necessary for the evolution of carbonic acid gas mixed into one uniform powder. Of these effervescing powders, Wood and Bauche's Dispensatory has on page 54 the following short notice: "Tartaric acid, dried by a gentle heat and then mixed in due proportion with bicarbonate of soda, forms a good effervescing powder, a teaspoonful of which, stirred into a tumbler of water forms the dose. The mixture must be kept in well stopped vials." Every body who has been making such powders, will have experienced that such a mixture, no matter how closely stopped it may be kept, will spoil and even become moist. Professor Otto has made some experiments and discovered some interesting facts with regard to this phenomenon, an account of which he has published in the *Annalen der Chemie und Pharmacie*, xvii, 378, of which I will give a short abstract. A mixture of equal parts of bicarbonate of soda and tartaric acid becomes moist when introduced into well stopped vials, and this change takes place the quicker, the better the air is excluded; it keeps better if the vials are simply covered with paper; but if the powder is kept in ordinary paper boxes, he has never seen it to spoil. Experiments of Bosse have shown that such a mixture loses weight from the expulsion of carbonic acid, which loss is greater, the better the powder is secured from contact with the air. This decomposition is introduced by a portion of moisture which the mixture contains, and which must evaporate on the air, to keep the powder unaltered. But if both ingredients are dried before mixing at a temperature between 120 and 145° F. the tartaric acid loses nothing, but the bicarbonate of soda 1½ per cent.; if the mixture is now made and introduced into a well stopped vial, it has commenced to decompose after the lapse of 24 hours and the decomposition progresses rapidly. But if the soda salt was dried at 167° F. (60° R.) the mixture was unaltered after having been kept 12 days in a closed vial. It is the water of combination, and not hygroscopic water that introduces the change, though damp favors it; this water is set free at the formation of tartrate of soda, and causes the moisture and liquefaction, it must be allowed to evaporate; that takes place easily from the fine powder at the tension of a low temperature, and for this reason the alteration is so little that it is without any consequence. Such a mixture which has been in contact with the air for some time and is still unaltered, commences to change as soon as it is introduced into a stopped vial. If the powder is directed to be kept in a vial, it might be more advisable not to dry the ingredients, but the finely powdered mixture. In no case, however, not even with the greatest care could the powder be kept for many years.

These remarks apply next to the effervescing powder of the Prussian Pharmacopœia, with which the experiments were made; it is prepared of 4 parts of bicarbonate of soda, 3 parts of tartaric acid, and 7 parts of white sugar. Immediately on throwing this powder into water, effervescence takes place violently. Other preparations, however, generate the carbonic acid slowly, even so slow that the greater part of the reaction takes place in the stomach. By this means quite a quantity of carbonic acid can be introduced into the stomach at a single dose, and is there mostly generated by degrees. Vogler gives the following formula: Exsiccated carbonate of soda  $\text{ʒij}$ , bicarbonate of potassa  $\text{ʒij}$ , sugar  $\text{ʒss}$ . If three drachms of bicarbonate of soda are substituted in this formula for the exsiccated soda, a larger amount of carbonic acid will be evolved. But as bitartrate of soda is a heavy salt and only slightly soluble in cold water, the idea suggests itself of looking for a comparatively more soluble salt, to take the place of the former in such a combination. Such a salt we find in the bitartrate of soda, which is much easier soluble in water than cream of tartar, but does not act so violently on the carbonate as the free acid, especially not if cold water is used for the menstrum. Bicarbonate and bitartrate of soda must be used in the proportion of 9:20 to furnish a neutral salt. If the ingredients are pulverized separately and afterwards mixed with finely powdered sugar, the mixture will keep very well in a paper box, with no other precaution except to keep it away from dampness.

In a similar manner effervescing powders may be prepared with bicarbonate of ammonia, of which 14 parts are necessary to completely saturate 15 parts of tartaric acid, so as to form the neutral tartrate of ammonia, or 80 parts of the acid are required if the formation of bitartrate of ammonia is desired. 7 Parts of bicarbonate of ammonia will saturate  $18\frac{1}{2}$  parts of bitartrate of potassa, and 3 parts of the carbonate,  $8\frac{1}{2}$  parts of bitartrate of soda, in the first case forming the tartrate of ammonia and potassa, in the latter tartrate of ammonia and soda. The same results may be arrived at, if bitartrate of ammonia is used, and it may suffice simply to state here the required proportions:

16 Parts of it saturate 7 parts of bicarbonate of ammonia, forming neutral tartrate of ammonia.

2 Parts of it saturate 1 part of bicarbonate of soda, forming tartrate of soda and ammonia.

4 Parts of it saturate  $2\frac{1}{2}$  parts of bicarbonate of potassa, forming tartrate of potassa and ammonia.

3 Parts of it saturate 1 part of dry carbonate of soda, forming tartrate of soda and ammonia.

An effervescing powder containing magnesia was formerly more extensively used in Europe than at present; it consisted of carbonate of magnesia  $\text{ʒij}$ , tartaric acid  $\text{ʒss}$ , sugar  $\text{ʒi}$ , oil of lemon gtt.  $\text{ijj}$ . An effective and very pleasant cathartic may be prepared from the following ingredients: carbonate of magnesia, citric acid, sugar,  $\text{aa}$   $\text{ʒij}$  to  $\text{ʒijj}$ , oil of lemon gtt.  $\text{ij}$ . The ingredients are to be separately rubbed into a fine powder and then mixed. Thus extemporaneously prepared and soon taken, it makes a pleasant drink and is a good cathartic. The powder is to be stirred into about a half a pint of water, when chemical reaction will instantly commence; when it has fairly set in it should be taken at once. I have omitted to make experiments with regard to its keeping. It re-

mains to be seen, and experiments ought to be made, whether it may be preserved unaltered for some time according to the plan suggested by Professor Otto. As citric acid contains much water of crystallization (4 equiv.) it might probably in this case be advisable to first expel the same by exposure to heat, and after it has become quite cool to mix it with the other ingredients previously finely powdered. It might be of great service upon voyages in cases where saving of space is of some account, and where bottles cannot be well packed; it would combine smallness of bulk and portability, and for these reasons would be preferable to the official solution. Its great advantage over the soluble citrate of magnesia would be its cheapness and its far more refreshing taste, produced by the carbonic acid set free and the citric acid still in solution. The citric acid in the formula given may be augmented, but as the reaction does not take place at once, and as it is drank before the saturation is completed, there is no reason for doing so; the solution will still hold a sufficiency of free citric acid to cover the taste of the magnesia salt, and render the draught quite a refreshing one; the chemical reaction is completed in the stomach.

If the administration of an iron salt is intended, Colombat's formula given above may be used, and all the ingredients mixed into one powder; but it must be carried in mind that this results in a *tartrate* of the protoxide of iron. As it has always been a desideratum how to administer a carbonate of the protoxide of iron in an unaltered state, and as even Vallet's mass becomes oxidized, the following mode of administration is suggested. Sulphate of iron  $\text{ʒiiss}$ , tartaric acid  $\text{ʒijiss}$ , dry carbonate of soda  $\text{ʒijiss}$ , sugar  $\text{ʒijj}$ . The chalybeate waters contain usually the carbonate of protoxide of iron, dissolved by an excess of carbonic acid, besides some alkaline salts. Physicians value these waters, because they are usually better adapted to the digestive organs and are easier assimilated, consequently of a quicker and more reliable action on the human frame than the ordinary ferruginous preparations. These properties are doubtless due to the presence of that mild acid, the carbonic and probably to the aperient salts, both of which combine their action with that of the iron. In the formula given above sufficient carbonic acid is generated to convert the iron salt into a carbonate of the protoxide, and keep the same in solution. Thrown into a bottle filled with water, a clear solution is obtained, from which on exposure to the air sesquioxide of iron is separated. If a brisker effervescence is desired, the acid and soda may be increased in due proportion, or instead of the latter,  $5\frac{1}{2}$  scruples of bicarbonate of soda substituted, when the mixture will contain double the amount of carbonic acid. A little sulphate of soda, corresponding with the quantity of iron will be formed, and the neutral tartrate of soda which does not decompose the dissolved carbonate of protoxide of iron. The quantity of these salts formed is but small, only large enough as is necessary for obtaining a sufficiency of carbonic acid; thus an opportunity is offered to combine with the powder such substances as may be thought necessary to increase its effect or direct it to a certain point; such substances of course must not interfere with the carbonate of iron. The teaspoonful of the above chalybeate effervescing powder contains about 18 gra. of sulphate, equal to  $7\frac{1}{2}$  gra. of carbonate of protoxide of iron. With regard to the sulphate of iron I would here yet remark, that even not the finest crystals ought to be used for such a preparation if stability is desired. Without

entering into details at present it may suffice to say, that this salt keeps best, by itself and mixed with other powders, if it has been precipitated from a concentrated solution by strong alcohol, well washed with the same, and afterward well dried in the open air, spread out in thin layers on bibulous paper.

My investigation with reference to the administration of quinine has not been completed yet, but the few experiments made convince me that it is a very good mode to administer quinine and cinchonine in an effervescing powder, made with citric acid and sweetened with sugar, previously rubbed up with the yellow skin of fresh orange peel. This corrects the taste better than lemon, cloves, or any other aromatic that I have tried. The bitterness seems to be less perceptible, when the effervescing powder affords a nearly neutral mixture, and a sufficiency of the orange skin has been added to impart a high and agreeable flavor to the draught.

*Administration of Ammonia.*—Bicarbonate of ammonia is devoid of the ammoniacal smell, and, although, having still a somewhat pungent taste, may be given in almost any form, even the powder and solution hardly requiring more than a little sweetening to render it pleasant to take. If the full effects of ammonia are quickly desired, we have no other preparation for such a purpose, but the various preparations of caustic ammonia and the officinal sesquicarbonate. This latter one only can be made into pills, but is usually given in solution, like spiritus and aqua ammoniæ; their taste and smell, however, are so very pungent and penetrating, that they cannot be covered or masked, either by aromatics or mucilages. As they are valuable remedies in scarlet fever, the small children, for whom they are prescribed, often object to taking them. We have, I believe, a much more convenient and pleasant form to secure the effects of ammonia without incurring its penetrativeness; we may arrive at this end in a somewhat similar way as above, in trying to obtain the properties of carbonate of protoxide of iron. If a solution of the neutral tartrate of ammonia is mixed with a solution of carbonate of potassa, an ammoniacal smell will soon be perceived, and a glass rod, moistened with muriatic acid, will evolve thick white vapors if held above the surface of the liquid. An interchange has taken place, a double decomposition, by which tartrate of potassa and carbonate of ammonia, has been formed.

If bitartrate of ammonia is mixed with a solution of carbonate of potassa, an effervescence will take place, and the formation of a double tartrate of the two bases; a further addition of carbonate of potassa will displace the ammonia from its combination, which, with the carbonic acid of the potassa salt and that still held back by the solution, combines to bicarbonate or sesquicarbonate of ammonia. But, if, after the saturation of the bitartrate of ammonia with carbonate of potassa, the carbonic acid is expelled by a moderate heat, or, if the double tartrate of potassa and ammonia be taken at once, the subsequent addition of carbonate of potassa causes the formation of monocarbonate of ammonia. Bicarbonate of potassa used in place of the carbonate, will, in all cases, cause the same result, that is, the production of bicarbonate of ammonia. Consequently, if we want the formation of monocarbonate of ammonia, we have to bring in contact neutral tartrate of ammonia, or its double salt with tartrate of potassa, and carbonate of potassa; as this latter, however, cannot be dispensed in form of powder, and as it dissolves in water too easily, and for this reason acts too quickly on the tartrate so as to form

carbonate of ammonia, it is not fit to answer the purpose of having the reaction going on in the stomach so that the powder may pass the organs of smell and taste without exhibiting anything but a salinous taste; the dry carbonate of soda then takes its place, on account of its similar action and its slower solubility; even carbonate of lime might be used in some cases; the powder should be mixed in syrup and given at once, but care should be taken not to direct an excess of carbonate of soda, which might develop its caustic properties in the stomach. Tartrate of ammonia, with which I have experimented a short time ago, I believe to be a far more stable salt than is usually supposed, but other salts such as the sulphate and muriate can be used in lieu thereof; it should, however, never be left out of sight that with these powders a double decomposition takes place, and that, for instance, a mixture of carbonate of lime and sal ammonia would be inadmissible, on account of the formation of chloride of calcium. One part of exsiccated carbonate of soda would suffice for one and three-quarter parts of the neutral tartrate, one and a quarter of sulphate and one part of muriate of ammonia.

Whenever medicine is administered, it ought not only to be prepared nicely, but appearance and taste ought to be made as agreeable as possible, so as to please the eye, and, if possible, the palate of the invalid. Very often has the pharmacist occasion to take notice of some behavior of medicines in this regard, often he may be interested sufficiently to make some experiments for the sake of information, and thus arrive at some satisfactory results. We know sugar has been tried to mask the taste of disagreeable medicines, aromatics and spirits have been tried, but for some in vain. The effervescing powder seemed to be one means that had not been sufficiently tried yet, and a desire to find a more pleasant way for administering ammonia, has also lead to the experiments with iron to discover a way to administer it in the state in which it occurs in most of the chalybeate springs. These are the reasons for having undertaken these investigations; if the result and the suggestions expressed will inspire others to a trial of pushing forward in this direction, the results might probably be very satisfactory.

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[Communicated for the Boston Medical and Surgical Journal.]

*Experimental and Clinical Researches Applied to Physiology and Pathology.* By ED. BROWN-SEQUARD, M. D., Laureate of the *Académie des Sciences* of France, Vice President of the *Société de Biologie*, ex-Secretary of the *Société Philomathique* of Paris, ex-Professor of the Institutes of Medicine in the Richmond Medical College, &c.

From August, 1852, to August, 1853, I published in the *Medical Examiner*, of Philadelphia, a series of thirty-three short papers, which was afterwards connected in one volume, under the title: "*Experimental Researches Applied to Physiology and Pathology.*" The following article is the first of a second series of papers, which, with the preceding series which has appeared in Philadelphia, will form a com-

plete summary of all my original researches in various branches of the medical sciences.

*I. Artificial Production of an Epileptiform Affection in Animals, and Etiology and Treatment of certain forms of Epilepsy in Man.*

Six years ago, I discovered that certain alterations of the spinal cord, upon mammals, produce, after a few weeks, a convulsive affection, resembling epilepsy. (See *Comptes Rendus de la Soc. de Biol.*, 1. ii., pp. 105 and 169—1850.) Since that time, I have found many new facts concerning this affection; and lately, in comparing the results of my experiments with what has been observed in man, in many cases of epilepsy, I have been led to some conclusions, which are I think, very important, as regards the etiology, the nature and the treatment of epilepsy. Although some of the results of my experiments have already been published (see my *Exper. Researches applied to Physiology and Pathology*, pp. 86 and 80, the *Archives de Médec.*, etc., *Fevrier*, 1856; and the *Moniteur des Hopitaux*, Oct., 1856, p. 954), I will relate them here, as I shall have to make use of them when I expose my views upon the pathology and treatment of epilepsy. I will also give a detailed account of some of the facts I have observed in animals, because these facts throw a great deal of light upon the phenomena of epilepsy in man.

§ I. I have found that the following kinds of injury to the spinal cord are able to produce epilepsy, or at least a disease resembling epilepsy, in animals belonging to different species, but mostly upon guinea-pigs.

1st. A complete transversal section of a lateral half of this organ.

2d. A transversal section of its two posterior columns, of its posterior cornua of gray matter, and of a part of the lateral columns.

3d. A transversal section of either the posterior columns or the lateral, or the anterior alone.

4th. A complete transversal section of the whole organ.

5th. A simple puncture.

Of all these injuries, the first, the second and the fourth seem to have more power to produce epilepsy than the others. The first particularly, *i. e.*, the section of a lateral half of the spinal cord, seems to produce constantly this disease in animals that live longer than three or four weeks after the operation. After a section of either the lateral, the anterior or posterior columns alone, epilepsy rarely appears, and it seems that in the cases where it has been produced, there has been a deeper incision than usual, and that part of the gray matter has been attained. In other experiments, few in number, the section of the central gray matter (the white being hardly injured) has been followed by this convulsive disease. I have seen it but very rarely after a simple puncture of the cord.

It is particularly after injuries to the part of the spinal cord which extends from the seventh or eighth dorsal vertebra to the third lumbar, that epilepsy appears.

§ II. Usually this affection begins during the third or fourth week after the injury. In some cases I have seen it beginning during the second week, and even one or two days before. At first the fit consists only in a spasm of the muscles of the face and neck, either on one or the two sides, according to the transversal extent of the injury. One eye or both are forcibly shut, the head is drawn towards one of the



shoulders, and the mouth opened by the spasm of some of the muscles of the neck. This spasmodic attack quickly disappears.

After a few days the fit is more complete, and all parts of the body, which are not paralyzed, have convulsions. According to the seat of the injury, the parts that have convulsions greatly vary. When the lesion is near the last dorsal vertebræ or the first lumbar, and consisting of a section of a lateral half of the spinal cord, convulsions take place everywhere, except only the posterior limb on the side of the injury. If the lesion consists of the section of the two posterior columns and a part of the lateral columns, and of the gray matter, convulsions take place everywhere without exception, but with much more violence in the anterior parts of the body. When the lesion exists at the level of the last dorsal vertebræ and consists in a transversal section of the two anterior or of the two lateral columns, convulsions are ordinarily limited to the anterior parts of the body; but it is a very interesting fact that they are not always confined to these parts, the two posterior limbs having sometimes very strong tetanic spasms, at the same that there are clonic convulsions in the anterior limbs. After a transversal section of the central gray matter, or of the whole spinal cord, in the dorsal region, convulsions are limited to either the anterior or the posterior parts of the body.

§ III. Convulsions may come either spontaneously, or after certain excitations. The most interesting facts concerning these fits is that it is possible, and even very easy, to produce them by two modes of irritation. If we take two guinea pigs, one not having been submitted to any injury of the spinal cord, and the other having had this organ injured, we find, in preventing them from breathing for two minutes, that convulsions come in both; but if we allow them to breathe again, the first one recovers almost at once, while the second continues to have violent convulsions for two or three minutes and sometimes more. There is another mode of giving fits to the animals which have had an injury to the spinal cord. Pinching of the skin in certain parts of the face and neck is always followed by a fit. If the injury to the spinal cord consists only in a transversal section of a lateral half, the side of the face and neck which, when irritated, may produce the fit, is on the side of the injury; i. e., if the lesion is on the right side of the cord, it is the right side of the face and neck which are able to cause convulsions, and *vice versa*. If the two sides of the cord have been injured, the two sides of the face and neck have the faculty of producing fits, when they are irritated. No other part of the body but a portion of the face and neck has this faculty. In the face, the parts of the skin animated by the ophthalmic nerve cannot cause the fits; and of the two other branches of the trigeminal nerve, only a few filaments have the property of producing convulsions. Among these filaments, the most powerful, in this respect, seem to be some of those of the suborbital and of the auriculo-temporalis. A few filaments of the second, and perhaps of the third cervical nerve, have also this property of producing fits. In the face, the following parts may be irritated without inducing a fit: the nostrils, the lips, the ears, and the skin of the forehead and that of the head. In the neck, there is the same negative result when an irritation is brought upon the parts in the neighborhood of the median line, either in front or behind. On the contrary, a fit always follows an irritation of some violence when it is made in any part of a zone limited by the four

following lines : one uniting the ear to the eye ; a second from the eye to the middle of the length of the inferior maxillary bone ; a third which unites the inferior extremity of the second line to the angle of the inferior jaw ; and a fourth which forms half a circle, and goes from this angle to the ear, and the convexity of which approaches the shoulder.

§ IV. Can we attribute to the great degree of sensibility of the face and of the neck the property exclusively possessed by these parts to produce fits in animals which have had their spinal cord injured ? In other words, is it in consequence of the pain felt, that there are fits in these circumstances ? This explanation is quite in opposition with the following facts : 1st. When the injury exists only in one of the lateral halves of the cord, the face and neck on the other side have not the power of producing fits, whatever is the degree of the irritation upon them. 2d. In the same case, the posterior limb on the side where the cord is injured, is in a state of hyperæsthesia, and, nevertheless, the most violent irritations upon this limb do not produce fits. 3d. It is sometimes sufficient to touch the face or the neck, or even to blow upon them, to produce the fits. Therefore, unless we admit that there is an extraordinary degree of hyperæsthesia in the parts which possess the faculty of producing the convulsions when they are irritated, we must admit that it is not the pain which causes these convulsions. There does not seem to be more sensibility in these parts than in other parts of the body. When a fit, or rather a series of fits, have taken place, and when, consequently, the power of having them is much diminished, it is easy to ascertain that these parts seem not to be more sensitive than others. The animal does not cry more when they are pinched or galvanized, than when other parts are irritated in the same way.

The production of fits by the irritation of certain parts of the neck and face, seems to belong to reflex actions. It is well known that an irritation of the skin and of the mucous membranes may easily produce certain reflex movements, which very rarely take place after an irritation of the trunks of the sensitive nerves. For instance, coughing is almost a constant result of an irritation of the mucous membrane of the larynx and of the bronchial tubes, while it is very rarely produced by an irritation of the trunk of the par vagum. Something similar exists for the production of convulsive fits when the face is irritated in animals upon which the spinal cord has been injured. If we lay bare the nerves of the face and neck of these animals, we find that even the greatest irritations upon them do not produce a fit. Besides, if we dissect a large piece of the skin of the face, so as to let it be in connection with the nervous centres only by the suborbitary nerve, we find that the irritation of this piece of skin is still able to produce convulsions, while the irritation of the very nerve which connects it with the brain does not produce any. It seems, therefore, that it is in the cutaneous ramifications of certain nerves of the face and neck that resides the faculty of producing convulsions in the animals upon which I have injured the spinal cord. There is, in that case, as I will show hereafter, something resembling what takes place in man in cases where a ligature around a limb is sufficient to prevent a fit of epilepsy.

§ V. What is the nature of the fits that we find in animals upon which the spinal cord has been injured ? I think these fits ought to be considered as epileptic. The following description of these convulsions

will show that, if they are not positively epileptic, they are at least epileptiform. When the attack begins, the head is drawn first, and sometimes violently, towards the shoulder, by the contraction of the muscles of the neck, on the side of the irritation; the mouth is drawn open by the contraction of the muscles of the neck, which are inserted upon the lower jaw, and the muscles of the face and eye (particularly the orbicularis) contract violently. All these contractions usually occur simultaneously. Frequently at the same time, or very nearly so, the animal suddenly cries with a peculiar hoarse voice, as if the passage of air were not free through the vocal cords, spasmodically contracted. Then the animal falls, sometimes on the irritated side, sometimes on the other, and then, all the muscles of the trunk and limbs that are not paralyzed become the seat of convulsions, alternately clonic and tonic. The head is alternately drawn upon one or the other side. All the muscles of the neck, eyes and tongue contract alternately. In the limbs, when the convulsions are clonic, there are alternative contractions in the flexor and the extensor muscles. Respiration takes place irregularly, on account of the convulsions of the respiratory muscles. Almost always there is an expulsion of faecal matters, and often of urine. Sometimes there is erection of the penis, and even ejaculation of semen.

These are the features which render these fits very much like epilepsy. But they seem to differ from this disease, by the three following characters: 1st. The animals sometimes cry during the fits, when they are irritated, and it seems, therefore, that they have not lost their sensibility. Now as the loss of sensibility is considered a symptom essential to epilepsy, it appears that we ought not to consider as epileptic the convulsions existing in these animals. But, we cannot admit this as a decisive objection, when we remark that frequently they seem to be deprived of sensibility, and that, in man, during true fits of epilepsy, there are sometimes periods where sensibility is not lost. 2d. These animals usually have no foam at the mouth, and this symptom has been considered by many writers as essential to epilepsy; but there can be no doubt that there are cases of epilepsy without any foam. Besides, we may easily understand why there is no foam ordinarily in animals: usually their fits do not last long enough. 3d. The fits in these animals are most frequently a series of fits lasting two or three minutes, and separated one from the other by a period of one or two minutes, during which the animals are able to rise and to stand on their feet. In this respect these animals differ from the majority of epileptic men, who have not a recurrence of fits after so short a period of calm; but there are cases of rapidly-recurring fits in man, and therefore we cannot deny that the fits of these animals are true epileptic fits, on the ground that they have that peculiar character of rapid recurrence.

The apparent differences between the fits in animals which have had the spinal cord injured, and true epilepsy in man, ought not, therefore, to prevent our considering them as epileptic fits. Not only the convulsions resemble those of true epilepsy, but the fits are not mere accidents, and they come by series of two or three, once a week, once a day, or even ten or twenty times a day, and the disease lasts for years. Besides, we find, after long and violent fits, that these animals are, for a time, in a state of drowsiness, like men after epileptic convulsions. It seems rational to conclude, from this discussion, that if the convulsions of these animals are not truly epileptic, they are at least epileptiform.

§ VI. The facts expressed in the preceding parts of this paper lead to many interesting conclusions. *First*, they give a positive proof that an injury to the spinal cord may be the cause of an epileptiform affection. *Secondly*, they show a wonderful relation between certain parts of the spinal cord and certain branches of some of the nerves of the face and neck. *Thirdly*, they show that epileptiform convulsions may be the constant consequence of slight irritations upon certain nerves. *Fourthly*, they show that even when an epileptiform affection has its primitive cause in the nervous centres, some cutaneous ramifications of nerves, not directly connected with the injured parts of these centres, have a power of producing convulsions, that other nerves, even directly connected with them, have not. *Fifthly*, they show that the cutaneous ramifications of certain nerves may have the power of producing convulsions, while the trunks of these nerves have not this power.

§ VII. The constant appearance of a disease very much resembling epilepsy, after certain injuries to the spinal cord, in animals, will perhaps settle the undecided question whether epilepsy, in man, may originate from an alteration of the spinal cord or not. It seems very strange that physicians have been so unwilling to admit that the spinal cord could be the seat of the primitive cause of epilepsy, when they admit that any nerve or any part of the encephalon, being altered, may produce epilepsy. The seat of this disease seems to be together in the part of the brain where resides the faculty of Perception and of Volition, and in the part of the cerebro-spinal axis endowed with the reflex faculty; but, whatever may be thought on this subject, it seems quite certain, from facts observed in man and in animals, that epilepsy may be produced by various kinds of alterations of the encephalon, of the spinal cord and of a great many nerves. In other words, the peculiar disturbance of the cerebro-spinal axis which constitutes epilepsy, may be generated by alterations of various parts of this nervous axis and by many nerves. This view does not agree with that of the most distinguished among the recent writers upon epilepsy. They have hardly spoken of the influence of the alterations of the spinal cord upon the production of epilepsy. For instance, M. Delasiauve (*Traité de l'Épilepsie*, 1854, pp. 174-181) does not speak at all of this influence, and we find that he places a case of epilepsy with an hypertrophy of the spinal cord among many other cases forming a series of doubtful or equivocal alterations. Hasse does not pay more attention than Delasiauve to the share of the spinal cord in the causation of epilepsy. He seems to take notice only of the influence of the alterations of the encephalon. (*Krankheiten des Nervenapparates*, 1855, pp. 266-67.) Romberg (*Lehrbuch der Nervenkrankheiten des Menschen*, 3d edition, 1855, vol. i. part 2, p. 686) has written only a few lines on the relations between alterations of the spinal cord and epilepsy. He thinks that some of the facts related by Oliver d'Angers prove the existence of these relations.

M. Bouchet, who had, in a paper with M. Cazanvielh (*Archives de Medec., etc.*, 1825, t. ix.), mentioned some cases of diseases of the spinal cord with epilepsy, has tried to show in a recent paper, (*Annales Médico-Psychol.*, 1853) that epilepsy is usually connected with the hippocampus major (*cornu ammonis*).

If we take notice of this fact that the spinal cord is very rarely examined, we understand that although the number of cases on record, as

far as I know, of alterations of this organ in epilepsy, amounts only to about fifty, there is an immense number of cases in which after death from the so-called idiopathic tetanus, the brain was examined, but not the spinal cord. In these cases, particularly where nothing is found in the brain able to account for the disease, it should have been of the greatest importance to examine the spinal cord. Such a neglect is a great fault, particularly since the publication made by Esquirol on the result of his autopsies. In the corpses of ten epileptics, Esquirol (*Traité des Maladies Mentales*, 1838, vol. i., p. 311) found nine times, various alterations of the spinal cord or of its membranes. In four cases, the spinal cord was softened, particularly in the lumbar region; nine times there were lenticular concretions in the arachnoid, some of which were cartilaginous, some osseous; once there were a great many hydatids in the cavity of the arachnoid.

Mitvie, quoted by Esquirol (*loc. cit.*, p. 311), found concretions in the arachnoid in two children who died from epilepsy.

Two cases of chronic meningitis with epilepsy, have been recorded by M. Clot. (*Rech. and Observ. sur le Spinilis*, 1820.) One case of this kind is related by Ollivier d'Angers (*Traité des Maladies de la Moelle épinière*, 3ème edit., 1837, vol. ii., p. 319).

Calmeil (*De l'épil. sous le rapport de son siège*, 1824) speaks of four epileptics, in two of whom the spinal arachnoid contained many cartilaginous plates, while in the two others the density of the spinal cord was considerably increased.

Bouchet and Cazanvohl have found, in many cases, circumscribed softenings of the spinal cord, and other alterations of this organ and its sheath.

Forget, quoted by Ollivier d'Angers (*loc. cit.*, vol. ii., p. 571), has seen two very important cases, which have a great analogy with what I have found in animals.

Jendrin, quoted by Ollivier (vol. ii., pp. 502 and 520), has found in two epileptics a tubercle in the cervical region of the spinal cord.

Barthez and Rilliet (*Traité des Maladies des Enfants*, 2d edit., 1854, vol. iii., p. 589) relate a very curious case in which epilepsy existed in a girl, who had an angular curvature of the spine in the dorsal region. The symptoms were very much the same as those existing in my animals, and, as it is in them, there was no foam at the mouth. There was no alteration in the nervous centres, except in the dorsal region of the spinal cord, which was almost liquefied. This softening occupied the whole of the cord transversely, and was about one centimetre long.

I might add many other cases of alteration of the spinal cord in epileptics, recorded by writers of the previous centuries, such as Bouet, Lieutaud, Morgagni, Musel, &c. In the work of Portal (*Observ. sur la Nat. et le Traitement de l'Épil.*, 1827, p. 28) there is a curious case of epilepsy with a dilatation of the central canal of the spinal cord, which was filled with water.

If epilepsy has truly been the result of an alteration of the spinal cord in all or some of the above cases, it might be asked why there are so many cases of diseases or injuries of the spinal cord without epilepsy. This objection loses its value when we remark that every day there are cases of tumors and various alterations of the brain without epilepsy,

and that, nevertheless, no one doubts that this disease is sometimes produced by such lesions. Besides, I have found that certain kinds of injury to the spinal cord, in animals, produce much more frequently than others an epileptiform affection, and there is only one kind of injury which seems to produce it constantly. This injury consists in a section of the whole of a lateral half of the spinal cord. I do not know of a single case, in man, where life has been saved after such an injury had been done to the spinal cord. In some cases, where, probably, a great part of the lateral half of this organ had been divided transversely, there has been no epilepsy. Such a case is recorded by Morgagni (*De sed. & causis morborum*, ep. 53, § 23); another by Boyer (*Traité des Maladies Chirurg.*, 1ère edit., vol. vii., p. 9), and a third by my friend, M. Vigues (*Moniteur des Hôpitaux*, 1855, p. 838). In animals, after an incomplete transversal section of a lateral half of the spinal cord, epilepsy is not very frequently produced. Therefore the negative facts concerning the influence of this injury in man, cannot be considered as a proof that man does not resemble animals in this respect.

I think the following conclusions may be drawn from all that I have said concerning the influence of alterations of the spinal cord upon the production of epilepsy: 1st. There cannot be any doubt that in animals certain injuries to the spinal cord frequently produce an epileptiform affection, if not true epilepsy. 2d. That in man there are a great many cases which seem to prove that alterations of the spinal cord may cause epilepsy.

Now, as we well know that the spinal cord has the same organization and the same vital properties, in animals and in man, it seems, from the first of these conclusions, that it may be stated more positively than I have done in the second, that epilepsy may result from alterations of this nervous centre.

§ VIII. Physicians admit now, two kinds of epilepsy, one of centric and the other of peripheric origin. I will try to show that although it seems to be of peripheric origin, it may, in some cases, be in reality of centric origin.

In animals, after an injury of the spinal cord, if we did not know that this injury exists and is the first cause of the disease, we should be led to admit that it is of peripheric origin, in finding that an irritation upon a very limited part of the spine produces fits. In a very important case of epilepsy recorded by Odier, the same thing has existed as in my animals. For many years the disease seemed to be of peripheric origin, and the autopsy has revealed that this was a mistake. This case is so interesting, in many respects, that I will give here a summary of its principal points.

CASE I.—A man had frequent *cramps* in the little finger of the right hand. The contractions went on increasing in extent and frequency; they by degrees extended to the fore-arm, the arm and the shoulder, always beginning in the little finger. At last they arrived at the head, and true fits of epilepsy, with loss of consciousness, took place. By means of two peculiar ligatures round the arm and the forearm, and which the man could tie easily, when he felt the first contractions of the little finger, the attacks were prevented at every threatening for two or three years. Unfortunately, he eat and drank too much, and, being intoxicated, he forgot the ligature when the initial cramp appeared, and

then he had a violent fit. From this time the ligature had no more influence over the fits; they became very frequent and always began in the little finger. Paralysis came on, and the patient died in coma. *Autopsy*.—An enormous tumor was found in the left side of the brain, below a place where the cranium had been wounded long before. (*Odier, Manuel de Médecine Pratique*, 2de edit., 1811, p. 180).

This case, and the facts observed in man, positively show that the apparent outside origin of epileptic fits does not prove that there is not an organic cause in the nervous centres.

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*Remarks upon the Medicinal Plants of Cherokee, Georgia.* By ROBERT BATTEY, of Rome, Georgia.

While this section of Georgia was occupied by the Cherokee tribe of Indians, the collection and exportation of medicinal plants and roots, together with slugs of silver, (obtained from a source now unknown) skins and venison hams were their only means of securing the requisite supplies of salt, whisky, gunpowder, calico, &c., consumed by them. One George Lavender, a white man, (who early attached himself to the Cherokees, and afterwards married, I believe, the daughter of John Ridge, one of their chiefs,) was the principal trader of the tribe. Establishing himself at the point now known as Rome, he carried on a considerable trade in the articles named, and is said to have had engaged in his service numbers of wagons, transporting these commodities to Augusta, a distance of two hundred and fifty miles, and returning with goods for his store. In this way he accumulated in some twenty years quite a large fortune. He sent to market chiefly pink root, serpentaria, senega and ginseng. I can obtain no definite data as to the annual amount thus sent off, or the relative quantities of each. *Spigelia* and *serpentaria* doubtless predominated largely. I am informed that he was in the habit of shipping *spigelia* with the top attached, for which he exchanged salt, powder and dry goods, allowing the Indian two cents the pound. During one season, having the monopoly of salt, he is said to have exchanged an entire sack in small lots, for slugs of native silver, weight for weight. Many marvellous tales are told of him and his traffic.

For some years prior to the removal of the Cherokees west, the supply of these plants greatly diminished, until the trade in them almost entirely ceased, and the Indians devoted themselves more to the culture of grain, which became so abundant as to be almost worthless as an article of sale. During the space which elapsed since their departure, the stock of medicinal plants has gradually accumulated in our forests, until a profitable business could again be done in them, had we the Indians among us as laborers. Our negroes cannot be depended upon for discretion and industry, while white laborers regard it as entirely too small business to engage their attention. It is scarcely probable that a business will ever again be done here in them, until the prices shall so far advance as to cause the avarice of our population to overcome their pride.

The fertility of our mountain lands, which chiefly distinguishes this section of Georgia, peculiarly fits it for the spontaneous growth and culti-

vation of medicinal plants. Our climate intermediate between that of Pennsylvania and Florida, gives us many of the native plants of each, and enables us to cultivate successfully a larger variety.

*Capsicum annuum* grows well here, but not to the perfection of the middle and lower portions of our State.

*Cassia Marylandica* is found in considerable abundance, employed to some extent in domestic practice; not used by our physicians.

*Chenopodium anthelminticum* grows very abundantly in fence corners; old fields are often nearly covered with it; seldom found in the forest; employed in infusion as an anthelmintic under the name of Jerusalem tea. But for the expense of apparatus a good business might be done in the distillation of the oil.

*Chimaphila umbellata* abounds in our forests, but not to the extent it does in portions of middle Georgia. It possesses a sandier soil than ours; much use is made of it "to cleanse the blood." It is sometimes called prince's pine.

*Cimicifuga racemosa* is very abundant along the Chattahoochie River, as also throughout the State; used by the profession in private practice, and freely by the "steamers;" known among the farmers as "rattle weed."

*Frasera Walteri* is very abundant, and frequently offered to druggists under the name of Columbia root; used as a substitute for colomba by the profession as well as in domestic practice.

*Cornus Florida* is a very common tree in our forests, of usually a small size, and is very attractive to the eye when in bloom. Dogwood bark is universally used as a tonic after fevers and intermittents.

*Anthemis cotula* is one of our greatest pests. May-weed, stink-weed, dog-fennel, and wild chamomile are its vulgar names. It completely covers waste lands and the commons around our cities and towns. The bruised herb is said to blister as promptly as cantharides. It is little if at all used here. The infusion gives rise to abortion in females. During the hot summer months it exhales a very offensive odor.

*Eupatorium perfoliatum* is very abundant, and much used in domestic and steam practice.

*Ficus*. The fig grows well with us in some of its more hardy varieties. Our cold winters occasionally cut them down. We grow a fig which, although cut by the frost nearly every winter, is still of so vigorous a habit as to spring up again and bear two crops of very excellent fruit during the season. There are many varieties cultivated in our State. During the past spring, the writer was presented with a box of most delicious figs grown and cured in the lower section of the State. More attention should be devoted to them as an article of commerce. No attempt is made to preserve them here, save in syrup and as pickles for the table, in which forms they are much esteemed.

*Gentiana* is an article brought to us from the country, which is not distinguishable in the root, from the official. The plant I have not had an opportunity of examining; we use it in the preparation of the official compound. It could probably be obtained in quantities.

*Punica granatum* is much cultivated in the gardens for ornament and use. While in bloom, the beautiful bell-shaped flowers are quite attractive. The fruit is generally esteemed, and its rind, as well as the bark of the root used medicinally.



*Hedeoma pulegioides* covers our hill sides in the open woods and old fields. It may be mown with the scythe and raked like hay. With apparatus for distillation, the oil could be obtained on a large scale.

*Humulus lupulus* grows finely with us. My garden supplies my retail trade with a quality for which I realize double the prices usually obtained for the commercial article. Little or no attention is given to their cultivation by our farmers.

*Linum*. No attention is paid to the growth of flax except upon a very small scale for the seed used medicinally. Oil is not made at all.

*Lobelia inflata*, although not indigenous to our soil, has been introduced in places among us, and we are occasionally offered both herb and seed.

*Maranta* has never been tested in this section; a few plants obtained by the writer some years ago died, and the experiment has not since been repeated.

*Mel*. Much attention is given to the production of honey for the home market, and small quantities of wax are sent abroad. Wild bees are frequently found in our forests, where they deposit honey in the hollow trees. They are marked, and in due season the tree is felled, and the mangled comb contracted and brought to market. A more than ordinary courage is required for success in this undertaking. The honey is inferior in color and flavor to that of the domesticated bee.

*Mentha piperita* and *viridis* are easily established in our soil, and take the ground completely, producing abundant crops of herb. This plant, in our hot climate, abounds, I think, more largely in the essential oil than in the State of Michigan, where I have observed it in cultivation. There seems every reason to believe that the manufacture of the oil of peppermint would be quite profitable here under judicious management.

*Monarda* is abundant in old fields, and along the road sides. No use is made of it.

*Amygdaline communis*. The almond, both sweet and bitter, have been grown successfully in the middle portion of Georgia. I know of no attempt having been made here.

*Olea Europæa*. Efforts have been made with success to introduce the olive upon our seaboard. It has not been attempted here.

*Ricinus communis* is found occasionally along our road sides. No use is made of it. It is said to drive moles from the gardens where it is grown.

*Terebinthina*. During a few years, the production of turpentine, rosin, and spirits has made some progress in our State. In my own immediate neighborhood the manufacture is as yet quite limited; not more being produced than is consumed in the counties immediately around us. The rosin accumulates on hand, and no arrangements are yet made for shipping it. Our distance from the seaboard precludes the probability of shipping it to advantage. Some experiments have been made in the distillation of the rosin-oil, and it is probable it may be advantageously disposed of in this way. The spirits is distilled from large cast iron pots upon which are luted tin or sheet iron caps, and the vapor is condensed in the ordinary copper worm. No water is introduced with the turpentine. The heat is badly applied, so that a portion of the rosin is often decomposed, and the spirits somewhat contaminated with rosin-oil. When brought to us fresh from the still, the oil of turpentine is almost wholly free from the odor and taste termed terebinthinate, which it acquires by exposure. The flavor of pine bark freshly stripped from the tree, is scarcely more acceptable than the recently distilled oil.

*Podophyllum petatum* is very abundant in low, moist woods. In many spots the roots may be obtained almost as rapidly as potatoes from the cultivated field, so thickly do they grow. It is much used in domestic and steam practice.

*Prunus Virginiana* is very abundant, and much used, both the bark and berries.

*Sanguinaria* is found abundantly scattered all through our forests. Much used under the name puceoon root.

*Menispermum Canadensis* is very abundant in low grounds along our rivers and small streams; much used as a tonic and alterative. It almost entirely replaces the *Smilax officinalis* with us.

*Sassafras* overruns our waste lands, and is usually considered a never failing indication of the poverty of the soil upon which it grows. *Sassafras* tea is a panacea with many; the pith is also much used.

*Senega* is found easily for domestic use. Whether it could be obtained in quantities sufficiently large to make it an article of regular export, I am unable to say.

*Serpentaria* is much more abundant, and could, I think, be made profitable. This is also much used. Two varieties are found and used indiscriminately. The distinctions between the two I have not examined with any care; they are probably contained in the books.

*Spigelia* is very abundant. It is occasionally offered in small lots for sale. It has gone much out of use with us.

*Stillingia* is indigenous, and used to some extent. I have not found it very abundant.

*Stramonium* is our "jimson" weed—a great pest.

*Taraxicum* is never found indigenous in our soil.

*Ulmus*. Our elm does not yield so mucilaginous a bark as that obtained from the Northern States.

*Zingiber* does not bear our climate well, unless it be protected during the winter. Besides the plants named, we have many which are used only in domestic and steam practice. With a few exceptions, we are unable to obtain a home supply of medicinal plants.—*Proceedings of the American Pharmaceutical Association.*

From the Western Lancet.

*Review of Dr. N. S. Davis' Annual Address before the Illinois State Medical Society, read at the Annual Meeting in Vandalia, June 4, 1856.*

The address of Dr. Davis is designed to show the evil effects of *alcohol*, in that state of the system known as *tuberculosis*. The author admits the general view to be correct which assigns to the tuberculous diathesis a low grade of nutritive actions; but he denies, in the most emphatic manner, that alcohol, or any of its preparations, can in any manner counteract the morbid conditions found either in the predisposition, or the openly developed disease. The following extract will give a clear conception of his want of faith in the virtues of alcohol:

"Some of my audience may be ready to ask, if I would deny the

almost universal sentiment of mankind, by claiming the broad ground that alcoholic liquors are neither tonic, invigorating, or supporting to the human system? I answer, unhesitatingly, yes! and base my answer not merely on the deductions of the most careful and varied experimental researches, but ask, in return, what there is in the tottering and unsteady step, the impaired digestion, the frequent functional derangements of the kidneys, exhibited in a greater or less degree by all habitual drinkers, which is indicative of increased physical strength, vigor, or power of endurance?"

It appears from the above extract, that the author denies to spirituous compounds either *tonic, invigorating or supporting effects*? Surely Dr. D. must have been laboring under some singular spirit of philosophical hallucination when he reached this conclusion. What will the surgeons think, who have administered these agents to patients laboring under excessive suppuration, gangrene, and other states of debility; or what the physicians, who have followed Stokes in the administration of wine in typhus fever, when the first sound of the heart becomes feeble? We can ourselves look back with surprise to an instance in which forty-eight pints of wine were administered to a typhoid fever patient! We thought at the time that the wine saved the patient's life; but if we can trust the conclusions of Dr. Davis, we were administering to him an agent which was not only entirely devoid of tonic, invigorating, or supporting influence, but in fact progressively debilitating and prostrating the system. Still, we have the satisfaction of remembering that the patient finally recovered from what seemed an almost hopeless state of prostration. We will leave Dr. Davis to explain how this could have happened, if wine possesses no "tonic, invigorating, or supporting" effect!

But Dr. Davis proceeds to explain why alcoholic preparations are pernicious in tuberculosis, either as a prophylactic or curative agent. The objections to alcoholic stimulus are the following: It diminishes the excretions, especially of carbonic acid, retards the conversion of venous into arterial blood, lessens the organic changes, depresses the temperature of the body, and lessens the tone of the muscular structures. Let us inquire more carefully into these effects.

1. *Alcoholic preparations diminish the exhalation of carbonic acid by the lungs.* This proposition has been clearly proven by many careful observers and experimenters. The explanation offered by Liebig, that the alcoholic preparations contain but a small proportion of carbon, with an excess of hydrogen, and that the latter is really the heat-producing agent, may have some force. It is certainly true, that the watery exhalation from the lungs, when alcohol has been taken, is not diminished; and hence it may be inferred, that the oxygen combines with the hydrogen, while the carbon remains unchanged. In this way a very rapid accumulation of carbon would take place in the blood, and the oxygen being appropriated to the hydrogen of the alcohol, the venous blood would finally predominate, *provided the metamorphosis of the tissues furnish the usual proportion.*

2 *It depresses the temperature of the body.* We cannot assent to this proposition, except in a conditional sense. If alcohol unconditionally diminishes animal heat, then we could safely and beneficially employ it in cases of inflammation, or any disease attended by febrile heat. So far, however, from this being recognized as a correct course of practice, we

presume a physician who would propose such a measure, would be regarded as demented.

The truth is, the heat-producing power of alcohol is altogether *conditional*. If given to a person in ordinary health, and in considerable quantities, so as to raise the carbon of the blood above the physiological condition, the depressing effects, at least secondarily, will finally be felt. The first and direct effect will be that of excitation; the second, that of super-carbonization and depression of the nervous system. It will follow, therefore, that animal heat will be diminished in this secondary condition, as a result of the depression which always follows over-stimulation, and also from the presence of a superabundance of carbon.

This is one point of view; let us examine the opposite. Suppose the system to be greatly emaciated—the tissues reduced to the lowest state of decomposition, and the carbon or heat-producing agent, almost exhausted. What then would be the effect of alcoholic preparations? Surely a *moderate* quantity of hydro-carbon would supply, to some extent, the deficiency, and the oxygen acting on this dement, would, beyond all doubt, augment animal heat. It will be perceived, therefore, that in one example alcohol will become a disease-producing agent, and diminish animal heat; while in the opposite condition, it will supply hydro-carbon, and thereby contribute to the development of caloric.

3. *It diminishes organic changes.* This is evidently correct; alcoholic preparations diminish the process of healthy metamorphosis, in a physiological state of the system, and it is equally efficient in arresting emaciation in morbid conditions. Now, while we would have no desire to secure the first condition (that is, to fatten a *healthy man* with spirituous potations), it might become exceedingly important to arrest progressive emaciation, such as occurs in phthisis, by the administration of these stimulants.

We think it is abundantly evident that Dr. Davis' premises are false, and therefore his conclusions vitiated. His great error consists in assuming that the morbid effects of large quantities of spirits, on a healthy system, can be taken as evidence of the therapeutical action of duly proportioned quantities in morbid conditions requiring stimulants. We have not before us the record of the experiments performed by Dr. Davis; but the following extract from the Address conveys a clear idea of the kind of facts on which he relies. In support of the opinion that alcoholic preparations cause a retention of carbon in the system, he says:

"So marked, indeed, is this effect that, in some of my experiments, the air exhaled from the lungs one hour after three or four ounces of brandy had been taken into the stomach, contained more than twenty-five per cent. less than the normal proportion of carbonic acid gas. And whoever will observe the purple lips, the bloated and leaden face, the slow and almost stertorous breathing of full intoxication, will see abundant proof of impeded circulation through the pulmonary capillaries."

It is abundantly evident from the above extract, as well as the tenor of the whole address before us, that the author has committed the common error of drawing his conclusions from the *pathological* instead of the *therapeutical* effects of alcohol. The introduction of "three or four ounces" of brandy into the stomach certainly far exceeds an ordinary therapeutical dose; and the "purple lips, the bloated, leaden face, the slow and stertorous breathing of full intoxication," are simply evidences of

the morbid effects of excessive quantities. What would Dr. Davis think of our philosophy if we should denounce opium as unqualifiedly injurious, and appeal to the diminished sensation, stertorous breathing, and even convulsions, in proof of our assumptions? And yet there would be as much propriety and force in such reasoning, as that which he has seen proper to adopt.

In the experiments of Dr. Boeker (which are among the most careful and valuable made on this subject), he took only a *tea-spoonful* of spirit of wine; while Dr. Davis attempts to draw conclusions from the effects of "three or four ounces" of brandy taken at once, or even from full intoxication! Surely no course of experiment or reasoning could be more fallacious and unphilosophical.

If any other evidence could be required to show the difference between the moderate and immoderate (therapeutical and pathological) effects of alcohol, we may refer to the effects produced on the blood. Habitual and excessive use of alcoholic preparations (*alcoholismus*) diminishes the solid constituents of the blood, reduces the proportion of red corpuscles, and impairs the condition of the fibrin with a superabundance of fatty matter. On the contrary, it has been shown that after a moderate use of beer, the watery proportion of the blood was diminished, while the fibrin and red corpuscles were increased. In short, the excessive use of alcohol impoverishes and depraves the blood, and speedily induces disease; while the judicious employment of these preparations may be made to invigorate the system, and promote assimilation.

An obvious and important error in Dr. Davis' theory is, that he denies to alcoholic preparations any tonic, invigorating or supporting power. If the author of the address will look at the rubicund countenance, red nose, florid complexion, and active circulation of the dram-drinker (before disease supervenes), he will hardly deny that alcoholic preparations possess very decided and potent stimulating and sustaining properties. The author will probably find that he has mistaken the temporary depression following over-stimulation, for the legitimate and necessary results of medicinal portions of distilled or malt liquors.

But there is another and even more important error involved in this broad and sweeping denial, namely, the failure to recognize the stimulating effects of these agents on the *digestive system*. All observations abundantly prove that, in debilitated states of the system (free from gastric irritation), alcoholic preparations improve the appetite, give greater force to the function of digestion, and therefore increase the tone of the body in a general sense. It is this way, at least in part, that these preparations become valuable in certain cases of tuberculosis. All must admit that it is an essential point in pulmonary consumption, to maintain primary digestion in as healthy and vigorous a condition as possible; and we believe candid experience will prove that no mere *drug* will do this so well, as a general rule, as the proper administration of alcoholic stimulants. Whatever difference of opinion may exist in regard to the effects of retained carbon, no candid and accurate observer can doubt the beneficial effects of alcoholic stimulants, when given in suitable cases, and proper forms and doses, in promoting primary assimilation.

The second part of the address is devoted to the detail of cases to prove, clinically, that alcoholic preparations produce no beneficial effect in tuberculosis. The author made observations in 37 cases, 24 of whom

were natives of Ireland. Of the whole number only 6 were teetotalers, while 31 drank more or less alcoholic liquors.

We are not able to perceive that these cases prove any thing in the premises. It will be remarked that a majority of the patients were Irish ; and with the well-known habits of a majority of such persons who are usually ill fed and much exposed, it is not surprising that the alcoholic liquors should prove ineffectual. Nay, more, it is quite probable, if not positively certain, that the want of substantial food, will under the effects of the liquor be positively pernicious. Most of the persons drink liquors of the worst possible quality, and in an irregular manner ; often excessively, so that great evils will usually follow.

We might oppose to this kind of evidence our own experience and that of many members of the profession. Thus we have known a case in which an habitual drinker, who died from accidental disease, exhibited evidences *post mortem* of a cicatrized tuberculous cavity. We might appeal, also, to numerous instances in which fermented and distilled liquors, conjoined with other agents, proved eminently useful. Thus we would leave the clinical observations of Dr. Davis and ourselves just where we find them : viz., undetermined. It will require very extended and accurate observations to determine the exact therapeutical value of alcohol in tuberculosis, and the question is evidently yet undetermined ; but when we witness a steady improvement of appetite, an arrest or diminution of emaciation, an increase of weight and strength, we cannot avoid the conclusion that agents which produce these effects must be capable of fulfilling at least some of the indications in treatment.

We desire now to define our own position, otherwise very erroneous conclusions might be drawn from the preceding observations. In the first place, we do not advocate the indiscriminate, much less the excessive, use of alcoholic liquors in tuberculosis ; and, again, we never employ it as the *principal* agent. We believe, however, that it promotes primary digestion, and thereby invigorates the general system ; that it checks excessive transformation of the tissues, and furnishes materials for sustaining animal heat ; that it produces a certain amount of nervous excitement which, within proper limits, serves to sustain the vital actions. This is the extent to which we employ it, never allowing excessive stimulation, and never permitting it to be taken except in conjunction with nutritious aliment.

In closing these hasty remarks we feel impelled to make a single observation on the subject of *teetotalism*. We believe that alcoholic liquors are unnecessary in a state of perfect health ; that they do nothing to sustain the system under protracted labor, or exposure to cold. The only exception to this last rule is, that when the food has been greatly reduced, moderate quantities of spirits may seem to supply hydro-carbon, and protect the system from rapid emaciation and increasing cold. We subscribe, therefore, mainly, to the teetotal system ; but we never permit these opinions to influence, in the slightest degree, the use of alcoholic preparations as medicines. No fear of making our patient a drunkard can deter us from giving such a remedy as his exigencies seem to require. If we permit certain moral abstractions to influence our practice, we would soon be left with a most meagre *materia medica*. Opium, on this principle, must likewise be banished under the apprehension that we may make our patient an opium-eater. There is but little fear, indeed, of making

patients drunkards when their stimulants are given *with* and *as* medicines ; but whatever may be the result, medical science rests on too broad a basis to be circumscribed by the dogmas and visionary abstractions of ultraism or ultraists.

In conclusion, we beg to assure Dr. Davis that our opinions have been expressed with candor and with the highest respect to him individually, but with a firm conviction that he is occupying false and untenable ground, and that he has been led into the position more as the result of ultra temperance notions, than calm and philosophic investigations. We beg him to review the subject, and we sincerely believe he will finally reach very different and more wholesome conclusions.

L. M. L.

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For the N. H. Journal of Medicine.

*On Inflammation of the Uterus, and Induration and Ulceration of the Neck of that Organ.* By GEO. W. GARLAND, M. D.

I design my remarks shall be as brief as possible, and wholly practical. An accession of a single practical fact, or well established principle, is truly appreciated by the profession and as my remarks are gatherings from practice and observation, I submit them to the profession believing some one may be benefitted by the hints they contain.

The uterus, like every other organ in the human body, is subject to various degrees of inflammation, from the slightest to the most intense, from that indicated by an augmented secretion of mucus from its lining membrane, to that involving its entire substance and which runs rapidly to gangrene.

As I wish mainly to refer to some of the events of *metritis*, I shall not follow the form of a treatise, because all that I could say of the anatomical structure of the uterus, its inflammation, symptoms, &c., can be found elsewhere. Neither shall I refer to all the causes of inflammation of the womb, many of which are common to the phlegmasia in general, while others are peculiar to the uterus and vagina ;—as the first, sexual connection,—suppression of the menstrua,—solitary enjoyment,—employment of violent emmenagogues,—severe labor,—manipulations with the hand,—use of instruments, &c. An accurate account of these as well as the symptoms of *metritis* can be found by referring to any of our standard works on diseases of women. There is one symptom, however, to which I wish to call particular attention, viz : when inflammation has succeeded labor, *the discharge of "sanguineous mucus,"* is *prolonged beyond the usual period.* As a passive inflammation of the uterus may and often does exist, and no marked symptoms manifested, this symptom is of great value in leading to proper investigation.

When the whole organ is inflamed the symptoms are always extremely serious and sufficiently apparent, but when the inflammation is seated in the mucus membrane of the cervix the pain is very slight, if any ; or when a small part of the neck is the seat of the inflammation, the pain is at the bottom of the vagina, and does not call our attention to the uterus ; hence the importance of this symptom.

I have known a sense of weight in the pelvis to be the only symptom complained of, except this discharge, when on examination per vaginam, the uterus was found congested and twice its natural size and weight; hence the importance and necessity of making inquiries when the sanguineous discharge is prolonged.

Whether the inflammation or congestion of the uterus is general or partial, there is, when compared with other organs, an unusual tendency to end in induration. This can only be accounted for by the anatomical position of the womb, by the crowded state of the parts when it is enlarged, by its pendulous position, and the gravitating tendency of its circulation, all of which tend to prevent its blood-vessels from returning to their normal state, after having been largely distended; and also accounts for the feeble action of its absorbant vessels.

That induration of the uterine neck, and ulceration about the os, is more frequently met as a sequela of inflammation, than what is found in other parts of the body I am fully convinced. My own observation has again and again admonished me of the necessity of making examinations by the touch, and with the speculum, during and after symptoms of uterine inflammation, from the fact that induration and ulceration, the legitimate fruit of inflammation, are quite sure to follow if the congestion, which is always left after the acute inflammation subsides, is not removed.

I visited a lady to-day, who cannot stand or walk, without suffering intensely from pelvic weight and pain in the back. She had a laborious labor, three months since, which was followed by a sanguineous discharge for six weeks, and has had leucorrhœa constantly since that discharge ceased. Examined per vaginam—found the uterus large and low in the vagina—neck inflamed—os open, so as to admit the index finger to the first joint—lips thick, hard and uneven—leucorrhœa mostly uterine. Physicians familiar with female complaints will recognize in this short account, an example of a large majority of cases, to which they are called and consulted by patients, who are troubled with “falling of the womb.”

I have treated many cases of general and partial inflammation of the uterus, with a view to restore that organ to its normal condition and I have nothing *new* to add to the treatment recommended by our authors, but would more *urgently* recommend *free leeching* of the cervix in all cases unless some constitutional condition forbids depletion.

During the last few years, I have used leeches in four cases of metritis, succeeding labor, and several cases produced by other causes, and the results have been equal, to say the least, to that obtained by leeching other parts. I most confidently recommend free leeching, tepid emollient injections, and subsequently cold astringent injections, in all cases of inflammation of the uterus; and that the progress of the disease be watched and the treatment *continued until the organ has regained its natural size and weight*. Unless this is faithfully attended to, nine out of every ten cases will, in from three months to one year, be followed with induration of the neck and perhaps ulceration about the os.

I would not deny that induration and ulceration may be produced by simple congestion, without active or passive inflammation. Dr. Tilt and others assert that the neck of the uterus possesses an erectile tissue, which becomes, by the various stimuli to which it is exposed exaggerated to engorgement. We know that parts possessed of this tissue do not recover from congestion as readily as parts not so organized. Still, I have never



seen a case where positive evidence of previous inflammation could not be gathered.

Examinations with the speculum during the progress of metritis reveals the true state and stage of the disease, and will establish the accuracy of the following remarks.

Engorgement is the common, indeed, almost universal condition of any part or organ, which has suffered from recent inflammation. The uterus, as I have stated, is, from its position, anatomical structure, &c., remarkably liable to engorgement. This, when not removed by treatment, terminates in hypertrophy, induration and ulceration of the neck and os.

An afflux of blood to any part destroys the balance between nutrition and absorption, and induration frequently follows from an undue accumulation of fluids, from the presence in the internal texture of parts, in the little spaces existing between their component tissues of fluid or solid matters or both, which are not found there in a healthy state. Blood, or fluids from the blood, may fill and wholly obliterate the interstices and concreting, tend to solidify and harden the part which they occupy. In technical phrase, fluids after having been extravasated, pass into a solid form, changing the size, form, weight and function of parts; this is induration, the consequence of inflammation. It often plays a fearful part in disorganizing the bodily frame, and in no part of the human organism are its consequences more deplorable than in the organ under consideration.

A lady marries at the age of twenty in the full vigor of health; is soon seized with leucorrhœa and other vaginal and uterine symptoms, such as tenderness of the parts, painful and disagreeable coition, frequent desire to micturate, &c. This state of things will last indefinitely, for months or years, when sooner or later she begins to feel pelvic weight and "dragging pains." No one who has made himself acquainted with the history of diseases of the uterus, can mistake the meaning of these symptoms.

Soon after marriage she was attacked with inflammation of the mucus covering of the vagina, and neck of uterus. Receiving no check by treatment, the cervix became the seat of chronic inflammation. The organ gradually increased in size and weight, by the interstitial deposit referred to above. The uterus which merely floats as it were in the pelvis by its increased weight, gradually overcomes the resistance offered by the vagina and its attachments to the surrounding parts, and descends lower and lower until it reaches the vulva. This is prolapsus uteri, and its usual progress, the time occupied by this change depending on the habits and condition of the patient.

Prolapsus uteri is an accident that does not occur at once and in my opinion it can be prevented in nine cases of ten by treatment, that is, when it is caused by uterine congestion. As soon as the uterus can be brought to its natural size and weight, it will gradually return to its original position, and all symptoms of prolapsus will disappear.

I could refer to many cases which have occurred in my practice, which might be interesting and substantiate the truth of the above statements, but will select those presenting the most points of interest.

June 10th, 1852. I was called to visit Mrs. —, married, æt. 42. She was before marriage, of an excellent constitution, and always enjoyed perfect health until after her first and only confinement, which took place at the age of 22. She spoke of her labor as having been most severe, and on first "getting round," she experienced a sense of pelvic weight,

and bearing down on walking and after any exertion. She recollected distinctly of having had a sanguineous discharge for weeks after getting about, that all who saw her exclaimed, "how very pale you are!" This prolonged show was followed by a profuse leucorrhœa. This condition of health went on for four years, when one day, after putting up window curtains, in doing which she had occasion to change from a chair to the floor, and back again many times, she felt the womb fall quite down to the vulva. She was in considerable pain and sent for her physician, who made an examination and told her she had falling of the womb, and caused her to keep in bed for a week or two. On leaving her bed the same accident occurred and continued to occur subsequently, to the time when I saw her, whenever she attempted exercise.

Her catamenia were menorrhagic and painful. She was very *pale, weak and nervous*. Had not left her house for fifteen years, and for nine years had not taken steps enough per day to cross a common room. She had secured the advice of many physicians as well as every quack that came that way. Absolute quiet, and weeks and months confinement to the bed, with vaginal injections, tonics, &c., had been used with little benefit. For several years the least exertion or attempts at walking would be followed by a show sometimes quite profuse.

On making an examination per vaginam, I found the cervix low down in the vagina, and very voluminous. A medium sized speculum exposed only a part of the cervix. Completely surrounding the os, and extending beyond what might be called the *lips*, a crop of peculiarly delicate granulations stood out, bleeding on the slightest touch but not very sensitive. The entire neck had a livid violet hue. Just within the os were a few points of ulceration. The os was dilated to the size of a ten cent bit.

Nitrate of silver was applied to the whole field of granulations, the pencil being passed slowly over the part. The velvet like growth shrank and shriveled before the caustic, bleeding at different points. She was requested to lie in bed, and the following day to use an injection of zinci sul. ʒi to the pint of water. In three days the granulations were much broken down and divested of their smooth heads. On the following day a profuse hemorrhage occurred, which relieved the surrounding congestion so much that instead of the violet hue the part was quite pale. Nitrate of silver was used as before, but less thoroughly. Ordered wine of iron in drachm doses three times a day. Saw her again in four days; found the granulations quite taken away and the surface somewhat tender to the touch. The application of the Nitrate at this time caused heat and smarting which lasted several hours. Iron to be continued.

To shorten the account of this case, I will say the caustic was applied once a week for four weeks, when the ulcers had healed perfectly. The congested vessels about the neck and os, had regained their former size and the uterus seemed one half less in volume and weight. The patient had gained flesh, color and strength, and was filled with hope and a vigorous determination to get well.

She was then ordered exercise in the open air and to use the following injection: zinci sul. ʒij, acet. plumbi ʒss, aqua bul. O iss, to be used with a block-tin four ounce, female syringe, with ivory tipped nozzle, which, by the way, is the very best female syringe now in use, as from its size and form the patient can give the parts a shower bath, with a force that completely washes away the secretions leaving no coagulated mucus

in the vagina to cause irritation as is the case with the common glass instruments.

It will be seen that the profuse bleeding which occurred during the application of the nitrate, completely obviated the necessity of any other local depletion, and at the same time most emphatically established the benefit of local depletion in uterine congestion.

One year since I treated a granulating ulcer of the anterior lip of the os uteri, by the application of caustic to the ulcer, astringent injections, alteratives internally, rest, &c., for five weeks, without any marked improvement. The lips were slightly œdematous which caused me to delay depletion. Finding the ulcer did not improve, four leeches were applied near the os. They filled well and the bites bled freely. The nitrate of silver was continued and in twenty-one days the ulcer was healed perfectly. I then introduced one of Hodge's pessaries which at once relieved the patient of pelvic weight and pain which had been a constant annoyance for two years.

I do not doubt, recent cases of inflammation of the cervix uteri have been treated successfully by attention to the general health, vaginal injections, hip baths, &c., but we all know the remarkable tendency of inflammation of the uterus to perpetuate itself indefinitely. The granulations met with about the os uteri are precisely like a granular state of the conjunctiva and may often be removed by constitutional treatment as recommended by that truly wonderful man, Dr. Abernethy, in his "Constitutional Treatment of Local Diseases." The medical profession are ready to bear witness to the truthfulness of his unique lectures, and yet we have all seen cases where constitutional treatment, though judiciously administered has failed to cure local diseases.

To successfully combat disease, we require *all* the means at our command, and in recommending local treatment in uterine diseases I would not disparage or cripple any of the resources of our art.

It sometimes happens, after an ulceration has healed, there remains an induration of the neck, and if left to *nature* the ulcer will reappear when the patient returns to her accustomed duties. So long as induration remains it will be vain and injudicious to encourage the patient that she will rid of her trouble. I had a case of this kind the last summer, which I pronounced cured, who returned to me again after a few weeks with all her usual symptoms. On examination with the speculum I found an ill-conditioned ulcer secreting pus abundantly. In such cases the ulcer is secondary to induration and is of minor importance; unless the induration can be removed it is folly to predict a cure.

In the above case, I applied four leeches to the cervix, taking care that they fixed in or near the ulceration. They filled in much less time than is usually occupied, and bites bled rapidly for several hours. I should think one pint of blood escaped from the bites. Saw her in the morning and after washing away the clots and secretions the cervix appeared pale and blanched. The nitrate was then applied. This was the ninth of June. On the twentieth three more leeches were applied, and their bites bled abundantly. Nitrate as before, every third day. At the end of a week the cervix was much reduced in size and high in the vagina; much of the pelvic weight was relieved and also a peculiar irritation at the neck of the bladder, of which she had made great complaint. She was then put upon the following treatment: rest, astringent injections, weekly cau-

terizations of the os and neck with nitrate of silver, an occasional saline purgative, light diet, and cold shower baths to the loins night and morning. Under this treatment the patient recovered.

It also frequently happens that an obstinate uterine leucorrhœa remains after all symptoms of inflammation and congestion have been subdued. In such cases I have for the last few years, been in the practice of injecting the uterus. At first I used a gum elastic tube connected with a syringe, but as I found some difficulty in introducing through the neck a flexible instrument, I procured a whale-bone nozzle, four inches in length, which being attached to a common syringe, renders the operation perfectly easy without a speculum. The injection should be slightly astringent at first as the immediate effect is sometimes really frightful. If the uterus is irritable, an injection will cause immediate uterine pain, with which the system sympathizes, causing the same symptoms observed in injuries of the testes, and if the injection is very stimulating, the effect will frighten the patient and friends, and although no harm may be done, the physician will find it difficult to secure a repetition of the operation. From one half to one drachm of sul. zinc. to the pint of barley water is the usual strength. I have known a few (three or four,) uterine injections, remove a troublesome leucorrhœa; and two instances where repeated injections into the uterine cavity, of barley-water, made astringent by adding one drachm of sulphate of zinc to the pint of water, has proved a remedy for sterility.

Mrs. O—— consulted me for a profuse leucorrhœa. Had been married twelve years. Had worked in Lowell Mills previously, and was then troubled with profuse menstruation and leucorrhœa. Since her marriage, she had grown thin, pale, and weak. The leucorrhœa was uterine. I injected the uterus three times a month for three months, giving at the same time, metallic iron (reduced by hydrogen) internally. At the end of this time all leucorrhœal discharges disappeared. In five months from the dates of her first prescription she became pregnant, for the first time at the age of thirty-seven, and in due time was delivered of a fine boy, much to the joy of an affectionate husband. Mrs. O. was his second wife, her husband having a daughter by his first wife, then some twenty years old; proving beyond a doubt to my mind, that the want of offspring depended upon a disease of the lining of the uterine cavity, and not upon a disease or radical defect of the ovarian glands.

I beg the candid consideration of the readers of the N. H. Journal of Medicine, on this interesting subject and their lenient judgment of my hastily written remarks.

Lawrence, Mass., Sept. 21, 1856.

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Translated for the Medical Examiner.

*Contributions to the Physiology and Pathology of the Heart.*

ON THE MOTION OF THE HEART.

During the past summer, the rare opportunity was afforded me of closely observing through a wound in the parietes of the chest, the conditions of the heart's pulsations; a phenomena frequently discussed, but

as yet obscure. The case occurred in a healthy man, 30 years of age, who attempted to take his life by stabbing himself in the breast with a sharp knife. The deed took place in a public garden, and I saw the patient about half an hour afterwards, when he was brought into the hospital. According to the testimony of those who brought him there, the bleeding had been profuse, and must at first have spirted in streams from the wound. He was pale and exhausted, but conscious. It was a smooth-edged, gaping wound, about an inch broad, inclining downwards, somewhat in front of the nipple, and at the lower side of the fifth left rib; upon each contraction of the heart, a considerable quantity of dark blood was discharged. It was evident that the patient, who belonged to the higher class, had intentionally selected that spot where the pulsations of the heart were best perceived. I pressed my index finger into the wound, and was greatly surprised to meet the flat, slippery point of the heart, which had, however, received no perceptible injury. There was scarcely a doubt that the pericardium was opened, as it would have been scarcely possible otherwise to have felt the point of the heart with the accuracy above described. Of course I availed myself of this favorable opportunity to study as far as was possible the motion of the apex of the heart. When my finger was introduced from the point towards the back, I could convince myself with the greatest certainty that at every systole the hardened and pointed apex of the heart slipped down along the front wall of the breast downwards, somewhat to the left, and a little below the lower margin of the wound; a copious discharge of blood taking place at the same time near my finger, whilst in the diastolic moment, the apex retreated upwards and could not be felt. The duration of the 1st period, when the point of the heart moved along my finger, appeared to be somewhat shorter than the 2nd period, yet I could make no positive assertion regarding this, as the contractions of the heart were so frequent, about 100 in a minute. Notwithstanding the strictest attention, I could not perceive the same about its longer axis. As regards the patient, it is merely necessary to state, that the suture was immediately applied. After a few days, pericarditis developed itself, with a loud, grating, friction sound, that lasted about ten days, accompanied by a moderate effusion into the left pleural sac. In spite of this condition, and of a slight hæmoptysis that occurred, the general symptoms were light; the patient rapidly recovered; the wound healed by the first intention, and after a few weeks he was discharged. Neither in the pericardium nor in the pleural sac, as daily investigations showed, did any admission of air take place.

It may be permitted me to offer a few remarks upon these observations. The most important object gained by it is, I consider, the establishment of the fact that during the systole of the heart, a true movement of its apex takes place in the direction from above downwards and towards the left. The question might arise as to whether this movement may not be considered only as an apparent one, induced by a systolic elongation of the heart; but since Harvey has shown most clearly the relations of the heart to the circulation, the previously accepted view of the heart's lengthening by the systole is entirely exploded, and at present the results of numerous vivisections and observations of Ectopia of the heart places beyond doubt the fact that the heart during the systole is lessened in its long diameter. The fact, therefore, that the apex of the heart can be

felt considerably lower during its systole only by an actual depression of the whole heart can only be explained in the manner as described long since by Skoda. Skoda has published similar observations on a new born child, with deficiency of the sternum, where the fissure was only covered by skin. I had been a long time convinced of the correctness of Skoda's view, that in decided hypertrophy of the heart, the deeper position of the apex of the heart during the systole might be proved by percussion, and those observations further made it highly probable to me that similar relations existed for the normal condition; this probability has since become positive certainty. This circumstance explains also the fortunate results of the above mentioned case. If the communicated facts are considered, we are necessarily led to the view that the stab must have been made at the time of the diastole, for only on such a supposition is it conceivable that the apex of the heart, which was felt beating so distinctly in the wound, could remain uninjured. Besides it is not inconceivable that the violent physical concussion at the moment of stabbing may have prevented the occurrence of the systole.

How is it now with reference to the oft-mentioned lever-like motion of the heart, in consequence of which the heart beats against the parietes of the chest? Harvey, Cruveilhier, and Follin have observed this in Ectopia of the heart, and the numerous investigations of Volkmann seem further to place this fact beyond doubt. It may be imagined, that I am not inclined to oppose such authority, or to place too much value upon one negative observation, whilst at the same time I do not wish to under-value its importance, as it appears to me to be the only one whose outward relations differ as slightly as possible from its normal condition.—For it appears to me, that it can be readily conceded that the possibility of a lever motion of the heart may take place where the wall of the chest is absent or broken through, without its being necessary to maintain its actual occurrence in an uninjured thorax; it may be exactly as it is in the motions of the exposed brain, the possibility of which we can with justice deny in an uninjured skull; in one case as in the other a normal obstacle is absent, and forces are put in action which could not be so at an earlier period, although in each case they must have been present. So long as we are ignorant of the *quantum* and *quale* of the determining forces of the heart's motions, it will remain a useless task to determine *a priori* the direction of these motions; if we concede, however, the motion of the heart to be downwards, and consequently the existence of a force that drives it there, as is proved by the foregoing, then may we also grant the existence of another force, which has the tendency to move the heart lever-like forward. This, however, is so restricted by the chest-parietes, that the resulting motion is in the direction downwards, the heart moving downwards is pressed more strongly against the breast wall, which condition possibly assists the object of the heart's contraction. The lever motion can never of itself be the measure and the true reason of the heart's pulsation. For the greatness of these pulsations does not depend upon the material of the lever, upon its thickness, &c., but upon the length of its arm and the moving force. The heart's pulsation ought therefore, all other things being equal, to be stronger in a giant than in a dwarf; in an adult than in a child; which all experience contradicts. On the contrary it cannot be denied that the thickness of the heart's walls has a positive influence upon the force of the heart's pulsations, as daily experience in hypertrophy of the heart proves.

The complete parallelism that exist between the anterior surface of the heart and the interior wall of the chest, the perfectly flat surfaces of both, and the intimate contiguity of the same in the closed thorax, do not accord as Kiwisch has already shown, with the idea that the apex of the heart beats against the breast wall, and is forced into the intercostal spaces. In narrating later experiments upon animals which I have had the opportunity of making, I shall return again to the question of the lever motion. Though I cannot entirely agree with Kiwisch's view, and must hold the motion of the heart in every case being downward and toward the left, yet I fully coincide with him when he makes the perceptible impulse of the heart depend not upon a peculiar beat of its apex against the breast, but merely upon the evident systolic hardening of the muscles of the heart pressed into the intercostal space. But it may be asked if this is the case, why is the pulsation of the heart felt only at a small spot corresponding to its apex, and not over the whole surface where the heart lies upon the breast-wall? Several things appear to me to contribute to this. First, that part of the heart, that is directly upon the breast-wall, belongs entirely to the right ventricle, which on account of its comparative thinness, is far less fitted to make its systolic hardening outwardly apparent, whilst that point of the left ventricle that lies close upon the breast wall, from its greater muscular character is consequently better fitted to make its action apparent. Besides, we must not forget that the juxtaposition of the upper ribs which are closer even than the sternum, and more particularly the thick muscles of the breast, render it almost impossible to perceive the heart's contractions under ordinary circumstances. I have myself often observed, in children and in emaciated persons, that the heart's impulses frequently occupy much greater space, and indeed can often be clearly felt wherever the heart touches. In hypertrophy of the heart, this is, as is well known, a daily phenomenon.—I have seen very frequently the right ventricle of the heart giving as decided an impulse as the apex, and yet there exist no reason for supposing that the motions of hypertrophical hearts, leaving the strength out of the question, differ in any way from those of the normal ones.—If the breast muscles of a rabbit be removed, and the intercostal space exposed, the pulsation will be distinctly felt on every part that the heart touches, though this could not have been previously perceived. There is, therefore, no necessity to postulate any other than the usual motions of the heart's pulsations.

Skoda (5te. Aufl. p. 162,) opposes his view of the action of the contracting power of the lungs upon the chest parietes, to the views of Kiwisch. The conclusion of his argument purports as follows: "Since the heart is held in contact with the chest-parietes, and the diaphragm by the expanded lungs, and the contracting power of the lungs causes a continual contraction of the soft parts of the chest-wall, then the heart, whatever form it may take, can never by a change of form cause an arching of the intercostal space or diaphragm from above or below; it must rather, if there be no other influence upon its condition, produce a slight drawing inward of the intercostal space and of its diaphragm."

In spite of my great reverence for Skoda, I must here be permitted to differ from him. If we were treating merely of the diminished space of the heart during the systole, a contraction of the intercostal space rather than arching of the same would occur; but when on that account the

heart passes into a more ball-like form, its muscular fibres hardening, and consequently producing a pressure against the chest-wall, which does not take place during the systole, then the question is, whether this pressure from without is sufficiently great, not only to prevent the contraction of the lungs, which acting through the heart produces a contraction of the intercostal space, but actually produces a positive rest. Already *a priori* this possibly must be admitted, since no other sufficient reason exists, and *a posteriori* shows even that the existence of a systolic arching is in fact the case.

On the rotary motion of the heart, mentioned by many experiments, the consideration of this case offers no conclusions. Whilst it is at first sight probable that such a one can only be sufficiently clear on the bases of the heart, and not merely at its apex, and it were unjustifiable to deny the motion solely on the ground of one negative observation; on the other hand, the peculiar undulating arrangement of solid exudations in pericarditis confirms the same to a very great degree.

I have intentionally mentioned the results of my observations, and such as immediately grow out of them, without bringing into the question any experiments on animals, because I am of the opinion that any deduction from the phenomena of the heart's motions in animals can only be applied with great care to man. But I believe not the less, that they must yield exceedingly important data, if they are brought into harmony with the observations on healthy and diseased men. I have the liveliest desire to observe the phenomena of the heart's motion in animals, in a much more extensive manner than has yet been offered to me in man; but I also believe that an actual advantage can only be drawn from such observations, by preserving intact the relative position of the heart and lungs, because, from the beginning, I was convinced that any important disturbances in the normal relations must produce such considerable changes in the heart's motion that any application of the same could not be thought of. Further observations have in the highest degree confirmed this view, and convinced me that in the open pleura, or in the removal or tearing out of the heart, its motions suffer the most important changes, and indeed not rarely are completely opposed to its normal condition. Too true it is, that the various investigations of extracted hearts have rather hindered than assisted the student on the motions of the same.—*Archiv für Pathologische, &c.*

### *Effect of Belladonna in Immediately Arresting the Secretion of Milk.*

Dr. R. H. Goolden has communicated to the *Lancet* (Aug. 9th, 1856) the two following cases, which seem to show that belladonna possesses the power of arresting the secretion of milk.

E. J., aged 28, was admitted into Anne's Ward, St. Thomas's Hospital, with a small child at the breast four months old. At the time of her admission she had swelling and acute pain in both wrists, right elbow, both knees, and left ankle. The knee-joints were distended with synovia, and erythematous patches were on the skin of the knees, ankles, and



wrists. She was bathed in perspiration, and the secretion of milk was abundant. According to the regulation of the hospital, the child was removed; indeed, from her helpless condition, it was necessary, considering the difficulty of attending to an infant in a ward with other patients. Soon after her admission she took eight grains of calomel and a grain and a half of opium, followed by a senna draught; and one scruple of nitrate of potassa, ten grains of bicarbonate of potassa, and half a drachm of spirit of nitric ether, in peppermint water, every four hours. The joints were covered with cotton wool.

On the following day, at two o'clock, I found she had been freely purged; the joints were in nearly the same state. She had had no sleep. The breasts had become tumid, hard, painful, knotty, and extremely tender. The superficial veins were distended. Some milk had been drawn, but the process was attended with great pain, and we could not listen to the heart's sounds on account of the tenderness.

A milk abscess, in complication with rheumatic fever, was of all things to be avoided, and unless the secretion could be at once arrested it appeared inevitable. In this strait I recollected that I had somewhere met with an observation (but I cannot remember whether it was in an English or foreign journal) that atropine applied externally to the breasts would dry up the milk; and, thinking it reasonable, I caused the areolæ of the breasts to be smeared with extract of belladonna, in the same way that it is used to dilate the pupil of the eye. I likewise ordered the addition of half a drachm doses of colchicum wine, knowing that whenever milch cows eat the meadow saffron in the pasture they immediately become dry; and though I have not much faith in colchicum as a remedy in rheumatic fever uncomplicated with gout, there could be no objection to its use, and it has the sanction of much higher authority than my own.

On my third visit, the following day, the first inquiry was about the breasts. They were all right. But was it the colchicum or belladonna that had relieved them? The extract was used before I left the ward; before the mixture was given the secretion of milk had been arrested and the breasts had become soft. The rest of the case has no further special interest. I will only state that there was no heart affection, and that the fever, though very severe while it lasted, was of short duration, and the patient left the hospital quite well in fourteen days.

The second case that occurred to me was uncomplicated with any disease, and as would usually fall under the care of the accoucheur rather than the physician.

A lady, the wife of a clergyman, was traveling with her husband, and, in order to accompany him, had weaned her baby (then seven months old.) Happening to be at Oxford at the commemoration festival, he came to me in great trouble, telling me that his wife had done a foolish thing in weaning the child, and that they were now arrested in their progress in consequence of the state of her breasts. They were tumid, very tender, painful, and hard, with large superficial veins, and the milk had been drawn with difficulty several times with temporary relief. I recommended the application of the extract of belladonna to the areolæ, desiring them to send for a medical practitioner if the inconvenience did not immediately subside, or unless she felt quite well. A few days brought me a letter, giving a very satisfactory account, and thanking me for what she was pleased to call my wonderful prescription. Within two

hours she was perfectly relieved, the milk absorbed, and (what is very important) there was no fever or other inconvenience attending the sudden suppression of the milk; and, instead of taking the opening medicines I had prescribed for her, she continued her journey the next morning.

I have not been able to discover that the fact that belladonna is available for the purpose of arresting the milk secretion is at all generally known—certainly it was not to several accoucheurs in large practice of whom I have inquired. The fact is important if true, for then milk abscesses will become a matter of past history, and probably many diseases of the breast may be rendered less complicated by its use.

The two cases I have detailed are not sufficient to prove that it will always be either successful or safe, but they render it highly probable that it is so.—*American Journal*.

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*Ergot of Wheat*.—Dr. Robert makes the following statements respecting this substance: 1. The medical and obstetrical property of this ergot is as incontestable as of ergot of rye, and its effects are as prompt, as direct, and as great. 2. Its hæmostatic action appears certain. Dr. Robert has administered it several times against abundant discharges of blood, and immediately after labor it has almost constantly and fully succeeded. 3. In the dose of one or two grammes, according to urgency, it has frequently succeeded in lessening, if not in completely arresting the hemorrhage; and this without appearing to produce any stimulant action on the uterus.—*Gaz. des Hopitaux, March, 1855*.

## EDITORIAL AND MISCELLANEOUS.

## ATLANTA MEDICAL COLLEGE.

For the benefit of those who are anxious to know something of the progress of affairs in reference to this Institution, and in response to inquiries upon the subject of the building, we have to say, that it is progressing with such rapidity, and is already so far completed, as to justify us in assuring our friends and those who are contemplating an attendance upon the next course of lectures, that there is *no doubt*, that it will be in readiness at the commencement of the regular term in May.

The edifice will be one of an imposing appearance, large, and well adapted to the purpose for which it is designed, meeting at once the demand for space, and the liberal arrangements, in every particular, required for the accommodation of the large classes, which are in a very few years to occupy it; so clearly indicated, by the almost unprecedented success, which has attended its progress thus far.

Indeed, in reference to the latter point, we may say, without qualification, that no institution, within our knowledge, medical or other, has attained the same success, in the same period, either as to numbers who have been in attendance, or with regard to the character and position which has been acquired, in view of the many obstacles which have had to be encountered, and the little pecuniary assistance derived from any and every quarter; indeed, it may be said to be almost exclusively the result of private enterprise, and private capital, combined with an energy which we have never seen equalled, much less excelled, and which has been determined to know no failure, or to be satisfied with anything less than the fullest success.

From the first, it has been the intention of the founders of this School, that it should be of the first order; and we hesitate not to say, that in five years, from the date of its Charter,

it will have taken a position, not heretofore occupied by any similar institution, (with a single exception) in the United States, in double the length of time, and this we say, not from any assumption of extraordinary ability on the part of the Faculty, but from the peculiar advantages which the institution possesses, from location, season of lectures, cheapness of living, and the determined and united purpose of those who control it.

In disclaiming, however, what might be construed into a ridiculous presumption, as to the qualifications of the Faculty, we can say in reference to all, (ourselves excepted,) that they have been fully endorsed, as entirely competent to the discharge of the duties which they are called on respectively to perform; several of them are acknowledged to be gentlemen of the highest order of talents and attainments, and, for the youngest member of the Faculty, now in Europe, a most brilliant career is allowed, upon all hands, to be clearly indicated; and though the writer of this article readily admits himself to be "least of all," he yet hopes, by diligence and perseverance, to be able to discharge his duties in a respectable manner.

Before concluding this hasty article, we would again acknowledge our indebtedness to the profession of the South, who have given so decided and efficient a response to the first effort which has been made in this section of the Union, to keep our students of medicine at home, during the summer, and we beg to assure them, that our continued and earnest efforts will be, to show that their confidence has not been misplaced.

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#### EDITORIAL CORRESPONDENCE.

PARIS, October 24th, 1856.

*Dear Doctor*—In my letter of the 15th inst., I promised, in my next, to give you, at least, the position of those who had taken part in the discussion now pending at the *Académie de Médecine*, upon the propriety of the injection of iodine in ovarian cysts. The discussion, as I stated in my last, grew out of the report of a very interesting case, by M. Barth, the peculiarities of which I have already given you.

M. Malgaigne was the first to obtain the floor, and gave his views at some length. Said he could see no advantage whatever in M. Barth's plan of operating—that the second puncture was of no use, and in surgery, as a general rule, what was of no use might result in injury. After discussing the usual plans of treatment, he expressed the opinion, that we should not attempt the radical cure—that the injection of iodine or other irritants into ovarian cysts is attended with very great danger. He was content, he said, to leave such cysts to themselves,—making a simple puncture when the symptoms become urgent.

As to the extirpation of ovarian tumors, he considered the idea absurd; had no confidence in the statistics of this operation as presented by American surgeons—regards them, as he does, the statistics of some surgeons in France, who present all their successful cases with great noise, and entirely forget their unsuccessful ones.

M. Moreau said he had witnessed several cases of pregnancy during the existence of an ovarian cyst, which passed through the term without any very unpleasant symptoms; that pregnancy, during an ovarian dropsy, was not so rare as many were disposed to believe. He found the plan of M. Barth's operation very rational; but, like M. Malgaigne, he was not disposed to attempt the radical cure—was content to make a simple puncture for the discharge of the liquid when the symptoms become urgent. In one case, he had seen a radical cure from a simple puncture.

M. Cazeau said he had seen a number of cases treated by the injection of iodine, and in quite the majority, with very happy results. That in cases where the injections of iodine are admissible, there is not the danger that M. Malgaigne would have us believe. That the injections of iodine are only admissible in simple ovarian cysts; that in the multilocular cysts of this organ, the injections of iodine, although sometimes successful, is attended with very great danger.

M. Velpeau considers the subject under discussion of the very greatest importance; that although much has been said upon the treatment of ovarian cysts by the injection of iodine, it had never been seriously discussed. He spoke of the epidemic which had prevailed in America for the extirpation of

ovarian tumors, but which, he said, in France, they had had the good sense never to attempt. Was of the opinion that the injection of iodine merited consideration, and should be studied with care. He entered into a discussion of the pathology of ovarian tumors, and their usual course when left to themselves; said that they might exist a number of years without any very unpleasant symptoms; mentioned cases that he had known to exist for thirty and forty years without treatment; was favorably impressed with M. Barth's plan of operating. He expressed the opinion that in simple cysts of the ovary, uncomplicated with tumor, &c., the patient not too much exhausted, the injection of iodine might be attended with success. He has seen one case cured by the injection of iodine when the cyst was multilocular. At the close of his remarks, he moved a continuation of the discussion.

At the next meeting the discussion was continued by M. M. Trousseau and Jobert. M. Trousseau was opposed to the injection of iodine; had never injected an ovarian cyst; considered it extremely dangerous; was content with a simple puncture, which he contended, if made early, before the cyst had lost all its contractility, was not unfrequently followed by a radical cure.

M. Jobert was a warm supporter of the injections of iodine. He said that in his hands it had been followed by the most brilliant results. His plan of operating is to leave a canula in the cyst until there are adhesions between the cyst and the walls of the abdomen, thus preventing the escape of iodine or other fluids into the cavity of the abdomen. Since he has adopted this plan, he has operated on thirty patients without any grave symptoms, and most frequently with permanent cure.

The discussion was continued, and from the interest manifested, as well by members as those in the lobby, will likely be protracted for several weeks. So far, one fact is to be remarked, that no one of those who have opposed the usual plans of treatment, proposed for the radical cure of ovarian cysts, have ever attempted the injection of iodine in such cysts.

I visited to-day *La Pitié*, and was pleased to find that M. Maisonneuve had given up his poorly ventilated and contract-

ed service at *Hôpital Cochin* for extensive wards in the above mentioned hospital. As usual, I found his wards crowded with Americans; attracted, perhaps, by the peculiarity and boldness of his operations. M. Maissonneuve is certainly one of the boldest, if not one of the best, operators in Paris, but still does not occupy that position that many believe due him.

I saw him ligate this morning the external carotid artery, for a malignant growth, at the base of the tongue, with the object of staying the progress of the disease, by cutting off the nutrition of the part. He says that in quite a number of cases, where it was not practicable to attack the disease, either with the knife or the cautery, he has ligated the arteries, supplying the parts with very good results. It is in another point of view, however, that I would more particularly call attention to this operation, and that is in the selection of the external carotid, for the ligature, instead of the primitive, which is usually ligated—in fact, which is the only recognised operation by standard works on Surgery, either in Europe or America. One of the principal dangers in ligating the primitive carotid artery, as is well understood, is the disturbance of the functions of the brain, which has, in a number of cases upon record, proved fatal in a very short time, and in others has resulted in hemiplegia of the opposite side, indicating a lesion of that side of the brain, corresponding with the artery ligated. To prevent the possibility of this unpleasant complication, M. Maissonneuve, proposes to ligate the external carotid, instead, of the primitive, in all lesions, where it is desirable to arrest the circulation, in the external carotid. Although he proposed and performed this operation several years ago, (I recollect to have seen him perform it twice in 1853,) it has not received that consideration from the profession, to which I think it justly entitled. He stated this morning, that he had ligated the external carotid fourteen or fifteen times, without the loss of a patient from the operation.

The point selected for the ligature, is just above the bifurcation—between the origin of the superior thyroid and the lingual arteries. After ligating the external carotid, if it be slightly raised, a ligature may be readily passed beneath the superior thyroid, the ligation of which, is necessary, from the proximity of its origin to the point selected for the ligation of the external carotid.

Within the past few days, I have noticed several cases of varicose veins treated with the injection of the per chloride of iron, in the diseased vein. M. M. Broca, and Maisonneuve, in whose wards I have observed the above cases, contend, that with the necessary precautions, there is nothing to be feared from such injections, and that they are attended with very satisfactory results. In the cases that I have noticed, and I suppose I have seen six or eight, there has been no unpleasant symptom—the blood readily coagulating at the point where the injection was made, forming a hard tumor, the size depending upon the quantity of blood contained in the vein, arresting the circulation, and these obliterating the vessel. The precaution important is, to have the vein distended with blood, and to compress the vessel above and below the point selected for the puncture, during, and for several days after the operation. The injection is made with a small graduated syringe, with a metallic point, which is thrust into the vein. From five to fifteen drops is injected, depending upon the quantity of blood to be coagulated. The per chloride of iron, as you are apprised, was in 1853 proposed, upon the same principle, for the treatment of aneurisms, and in a number of cases was injected into aneurismal sacks, with, however, very unfavorable results, several cases proving fatal. It is at present entirely abandoned.

Experiments with carbonic acid still continue; it is rather gaining in importance than otherwise; numerous cases are reported of its happy effect in allaying pain.

The regular clinical Professors will take their places in a few days, when I hope to be able to give you something more interesting.

Yours, &c.

W. F. WESTMORELAND.

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### INTRODUCTORY LECTURES.

We are in receipt of several introductory addresses delivered at the opening of the present term of Winter Lectures on Medicine; and first, we have the "Lecture Introductory to the Course of Institutes and Practice of Medicine, in the Medical College of the State of South Carolina, by Samuel Henry



Dickson, M. D., LL. D., Charleston, November 3d, 1856." Of this we can say, as of everything from the pen of the distinguished author, that it is very interesting.

In considering the elements which go to constitute the character of the true Physician, he remarks :

"If you estimate this character at its proper value, if you regard it with the respect and veneration to which it is indeed entitled, you will resolve to spare no pains which shall be necessary to make it your own. Let us enumerate and dwell briefly upon a few of the more prominent of these elements.

"The Physician must, above all other men, be *diligent*. Think how much is to be done, and recollect that we have but one short life to spend upon it. We engrave for eternity; let no day pass without its added line: '*nulla die sine linea*;' we have no time to lose. To raise a proper superstructure, the foundations must be laid deep and wide. Each step must lead on to another; nothing is infertile; nothing transient; whatever is done, remains; we paint in fresco, the picture and the ground on which we lay our colors, hardening into stone as we paint. I do not know any individual more entitled to pity than a high minded and conscientious young man, who, upon entering the ranks of our profession, finds that his early education has been defective, and that he labors under the heavy disadvantage which such deficiency must necessarily entail upon his whole life career. He will not be consoled, even by the thought that he has not been alone, or chiefly, who is to blame for this great error; that he is partly the victim of a bad system, and partly of an unjustifiable impatience peculiar or almost peculiar to our country, which urges to enterprise and action the immature adolescent before his faculties have reached their due development, and thus denies him the reasonable opportunity for requisite preparation and preliminary studies. He will find abundant consolation, however, in the reflection that it is never too late to begin a correct course—and that 'nothing is denied a well-directed labor, though nothing is attainable without it,' and in the fixed resolve carried out without delay, and with steady perseverance, that he will comply with the requisitions of the contingency, and raise himself step by step, to the lofty height he aspires to reach.

" 'Take comfort, my son,' wrote the illustrious Chatham to

the no less illustrious Boy Minister, who so long governed the mighty Kingdom of Great Britain, 'Take comfort, my son! after all, you have only the Cyclopedia to master.' The domain of Scientific Medicine reaches to-day over the vast realms of modern attainment, comprising within its recognized limits an acquaintance with every department of human knowledge. 'What science is there'—exclaims a recent writer on Physiology, himself an admirable example of omnivorous acquisition—'What science is there which is not involved in explaining our structure and functions? Anatomy, Chemistry, Zoology, the various branches of Natural Philosophy, which themselves require as their foundation Mathematics,' are briefly specified, but it would be difficult to say what could be excepted.

"Little less, indeed, than the complete circle so tersely indicated by Chatham, will suffice for the Physician. 'To learn to reason, he must know.' Knowledge is conveyed and bound up in language. Classical learning, therefore, and what is called literature, are necessary for him as truly as science proper, that he may understand what he reads, and be capable to state, to narrate, to infer, to argue, to prove, to convince. Modern languages are indispensable to him, if he aim at the highest point of excellence and its prompt attainment. It is mortifying to be compelled to wait for translations; and still more, to depend upon others not only for the selection of what they choose to distil for us from foreign materials, but for the correctness and truthfulness of the conveyance. I am aware that 'all is not possible to all,' nay, perhaps not to any; but I am anxious to impress upon you the urgent demand that you should attain to all that is possible, each one for himself. It is infinitely easy to know too little; infinitely difficult to know too much! Besides, each one has his peculiar or special aptitudes, which he will never discover, nay, which have no means of developement, but through diligence, patient study, vehement mental effort. As in a course of gymnastics, we find ourselves, upon earnest and repeated trial, capable of feats of strength and agility unthought of and un hoped for, so I will venture to assure you, that the steepest and loftiest heights of the apparently impossible are often—and sometimes with unexpected ease too—scaled by the resolute climber. Forward, then, and be your motto, *Excelsior!* If your prelimi-

nary education have been imperfect, take up again, with manly determination, the grammar and the dictionary. Master your own glorious tongue, the language of Milton and Shakspeare and Bacon—of Sydenham and Cullen and Rush. Enable yourselves to communicate your thoughts in the fixed and stereotyped—not dead—but emphatically living and immortal dialect of universal science employed by Cicero and Pliny and Celsus, Stahl and Gregory. Open with familiar key the new and daily multiplying treasures accumulated by our French and German brethren, and it is impossible for me to exaggerate the advantages and facilities which will accrue to you from these highly available sources of intelligence.

“The Physiology of the present day—which the sagacious Draper has labored to place among the positive sciences—its Pathology, its Diagnosis, its Therapeutics, are peremptory and exacting. The immense resources of Chemistry must be brought within your reach—its universally applicable principles, and at least so much of its minute details as belong to the relations of organized substances to each other and to the agents that surround them. Here there is nothing constant but change. Progress is perpetual. The truth of to-day is proved to-morrow to be error; yet it is fruitful error leading on to further and perhaps more fertile error, and still further at last to truth. Encircled and sometimes narrowly circumscribed by the *quid ignotum* all around and about us, the small area of uncertain light almost buried in the all-enveloping darkness, we feel our way from point to point, ever hopeful and undismayed, because ever and anon sure to be gratified by some new acquisition—some new foothold from which again we start on our ennobling career of unceasing advancement. Of all conquests possible to man, this triumph over ignorance is doubtless the most elevating.”

We have also another Introductory from the same Institution, delivered by Prof. James Moultrie, at the commencement of the Course on Physiology, in reference to which noble science, he remarks:

“It is apparent that physiology, as I have said, is once more reclaiming to itself its ancient extent and significance; and to know it as it should be known, those who would enter upon the career which it prescribes, must fit themselves for it by va-

ried as well as extensive acquirement. The physiology of to-day is vastly different from what it was in days of yore. Indeed, so greatly do they differ, that were it not for the historic links which unite them, it would not be possible to trace their genetical relationship. My occupancy of a Chair in this Institution, which has been exclusively appropriated to it, and the lectures which I yearly deliver, jointly with my several colleagues, evidences the estimation in which it is held, and its multifarious relations to what they teach, as well as to the essential attainments of a medical education. Other evidences of it, also, will necessarily and repeatedly be brought to notice in the course of the observations and reflections which it will be pertinent to make, in reference to comparative and human anatomy and physiology, and their kindred inquiries, psychology, and zoology. We shall have frequent occasion, too, to allude to the varied, general relations and conditions to which, as we have said, it is indebted for its origin and progress.

What ideas may prospectively be formed of its development and availability, we are in no condition now adequately to determine. From what has recently been accomplished, however, we are entitled to expect infinitely more. The services it has already rendered to psychology, fully justifies the remark. All the sciences have their being in the mind. Hence, psychology has been called the "Science of Sciences," and that all look to it for "first principles," to guide them in the several tasks which they have to perform. A clear and comprehensive natural philosophy of the faculties and operations of the understanding, has long been a desideratum in mental science: for the moralist turns to it for light to illumine the chambers of conscience; the legislator for a standard to measure the degrees of crime or of guilt, and a sanction to award their punishment; the educationist for data to organize systems of instruction, which shall conduce towards the promotion of, rather than counteract, the fundamental teachings of nature; the physician for correct and clear ideas of the nature of insanity, and apt contrivances for its prevention and remedy; and the theologian for a solution of the problem of the origin of evil, and a true elimination of those super-sensualities of the soul, which have been commissioned to lift it above

the sphere of earth, and to wing it to those elevated regions, where it may commune with thoughts pertaining immediately with the Infinite. Their appeals, however, have not as yet been answered. While, in coteremporaneous language, it has borrowed light from all, it has shed none upon them in return. The question naturally arises, therefore, as to why is this? It is because psychology has been without an appropriate guide, and has for ages been wandering in speculation and hypothesis. Until very recently, its home has been in the region of the abstract; but it has, at length, passed from this, into the domain of the concrete. It has become a factor of physiology, and in common with it, commences to rebuild a new structure on the anatomy and function of the nervous system. For this change it is indebted to positive philosophy; and in its renewed activity, promises, from its recent gains, inconceivable advantages to be hereafter won in fields of inquiry that have only been partially explored.

“Who, in this new connection, have been most distinguished for their researches and successes, the annals of the present day very unequivocally declare. Among them, may be found the names of physiologists and physicians. And the reason of this lies in the special nature of their calling. The physician, unless he prove unworthy of the title which he bears, must necessarily be a physiologist. To him, for a long while, was entrusted the cultivation of this science and its congeners, and the exclusive management of the insane: an intelligent consciousness of the essential characteristics of that disorder, must always have been experienced by him, therefore, as a painful and pressing necessity. Out of this source consequently, has come much of the illumination which has been shed, and to which we owe better ideas of the nature of intelligence. The course of investigation into which he was thus led, and which he has pursued with so much diligence, relative to the structure of the brain, and spinal marrow, and nerves, together with their functions and disorders, as well as other related objects, could not fail to introduce new results, and thereby to prepare the way for, as well as to lay the foundations of, a renovated psychology, which, under the guidance of its new and positive methods of inquiry, bids fair to clothe itself, in due season, with the certitudes which have already invested its predecessors and coteremporaries.

"In elucidation of the above, it would be easy to cite examples; but passing by the names of many, it is sufficient to enumerate, from among the living, the conspicuous ones of Bell, of Hall, of Carpenter, and of Noble. With their labors, we shall become partly acquainted shortly. It is only proper to remark here, that these writers, in the important discoveries which they have made, relative to reflex action, instinct, intelligence and volition, have created an epoch in the history of that science. The nervous system, as an entirety, now stands forth, as the great organic mechanism of all their varied phenomena; the link between the forces within, and the forces which environ them without; the substratum, through which they severally correlate; and by means of which, the relations of the interior are enabled to co-ordinate with the relations of the exterior. Progress and development thus have substantial, as well as a speculative, basis, and its records are rendered permanent, as well as practicable and consecutive. Experience, the primordial basis of all knowledge, is provided with a fixed habitation, as well as a name; is no longer an abstraction, intrinsically and isolatedly related to mind; but a concrete, which has a being in statics as well as dynamics, in structure as well as action, in matter as well as force. Experience is organizable, and organized. It becomes, in other words, a constituent of organization, and may be integrated; and in this fact, lies the perpetuity of the sciences, and their improvement, as well as the perpetuity of society, and its civilization. The "organization of societies" a phrase so rife in human parlance, and so essential to the language of the statesman, the politician and the common people, agreeably to this doctrine, is not merely a metaphor, or fiction of expression, but a conventionalism, denotive of a structural and functional truth, having the same organic establishment in man, *ceteris paribus*, as that which the instincts have in the beaver, the bee, the termite and the ant. The essence of materiality, and the essence of immateriality, are propositions of the inconceivable, and no longer find entertainment within the legitimate exercises of philosophy. But if experience, which is science, and civilization, and thought, are concretes; if every thought is accompanied with some movement among the constituent primordials of the brain, and these give rise in turn

to correspondent activities of thought; then may they severally and reciprocally entail upon one another the influences of their mutations, whether these be for good or for evil. This observation, let it be remembered, is momentous; for it affects alike the physical, and moral, and intellectual, and theological education of the world. If pedestrianism augments the muscularity of the leg, and the muscularity of the leg augments the capabilities of the pedestrianism; if labor at the anvil develops the muscularity of the arm, and the muscularity of the arm enhances the capabilities of the anvil; if thoughts alter the volume, too, and the form of the several parts of the brain, and those altered parts of the brain enlarge, by reciprocation, the comprehension, and adhesiveness, and versatility of thought; then have we attained a concrete explanation of the fact, that many actions which, in their incipency, are conscious and difficult of performance, by use are in due season rendered unconscious and easy; that the voluntary simulate the reflex, and the reflex the voluntary; and that those which, in the inferior races, are instinctive and automatic, in the superior, are changed into the intelligent and free. The law of unity of composition and of progressive development, thus finds its illustration and exemplification in the differentiations of species.

“Human society, for these reasons, as well as human civilization, is dependent, alike with comparative society, upon structure and function. Both have their seat in the neurine material of which that structure is composed, and in those correspondences of internal and external relations and adaptations, in which we have found the very essence of the experience which distinguishes the former, to consist. Hence its indelible registration, and transmissibility from generation to generation.

“It is the province only of superior minds, however, to contemplate the exalted relations which physiology has been thus imperfectly shown to bear to the hierarchy of science, or to carry forward the investigations to which their meditation leads. The subject has been introduced at this time, therefore, for the simple purpose of elucidating its variety and extent, and of affording a glimpse merely of that noble field, in which you are invited to labor, and to win, if you choose, an

enduring crown. As it now presents itself to our reflections and study, it is the complex result of thousands of minds, professional and unprofessional, severally and unitedly at work, simultaneously and consecutively, century after century; and in all that lengthened and lengthening period, there is no science, which has not, as has justly been remarked, been tributary to its progress. Who, then, it may be asked, in view of this complexity and comprehensiveness, of its retrospective, present and prospective relations and developments, is competent to embrace it, or to undertake the instructions called for, by the requirements even of this Chair? I know of none. From its complete performance, I do not hesitate to say, I involuntarily shrink. The fulfilment implies an amplitude of attainment, correctness of knowledge, and scientific readiness, which few are permitted to aspire to, and fewer still to attain.

“To the Medical Profession, in view of its own conceived utility and dignity, and as that dignity and utility are offered to the world, its cultivation and diffusion is of the utmost importance. It should not only be cultivated by its votaries, but it should be insisted upon as a separate and indispensable branch in every College, of a medical education; and no pains should be spared to introduce the study of its outlines into our elementary schools; so that children may acquire some knowledge of its value, and its extension thus become universal. No greater boon could be added to the provided means of civilization than this. It is the only specific against quackery. Professor Draper remarks that “Empiricism could not flourish as it does, if the structure and functions of the body of man were better understood.

“I rejoice at the efforts, therefore, which have recently been made to give it this direction; and that the success which has attended them, justifies their continuance. I rejoice, too, at the necessity which the freer diffusion of the knowledge of it will impose on candidates who offer for the honors and emoluments of the Diploma, to become well acquainted with the treasures which it contains. “A great revolution,” I am persuaded, in common with the author before mentioned, “is impending in the practice of medicine,” and that “in the future, the greatest physicians will be the greatest physiologists;” and in closing, take occasion to superadd my further testimony



to his, that "He can best correct the imperfections of a machine, who best understands its structure and action."

In addition, we acknowledge the reception of the regular Introductory Address, delivered before the St. Louis Medical College, by M. M. Pallen, M. D., Professor, &c., which we can also cheerfully and warmly commend. In speaking of the wonderful developments of Modern Science and particularly of the telescope, the instrument of Astronomical Science, he continues :

"But it is not the instrument of the Physician. Yet there is one which belongs to him, whose revelations are no less wonderful : I allude to the microscope. Second only to the telescope, though in many respects superior to it, it transcends all others in its scientific value. It peers into the invisible life around us, and brings into view worlds in every direction—all space, within us, and without us, and around us, swarms with countless hosts. The zephyr, as it floats through the trees, fans in every leaf its millions of inhabitants. The air, which we respire, is replete with its myriads of aërial tiny travelers. The flints, the limestones, the tripolis, the soils, when examined with the microscope, proclaim the existence of untold numbers of living creatures in ages gone by ; nay, more, they show that the very rocks we tread on are made up of them. Ehrenberg found that tripoli, a certain kind of silicious stone, is entirely composed of the remains of organic beings, there being about 41,000 millions of individuals in every cubic inch, or about 187 millions in a single grain. The city of Richmond, in Virginia, rests on a foundation composed of similar organic beings : the stratum, several feet in depth, extends a distance of twenty miles in length. It is curious to know, that Naturalists are not yet agreed whether these minute fossils, when living, belonged to the animal or vegetable kingdom, so indistinct is the line which divides the one from the other. The chalk cliffs of England are made of minute shells and fragments of shells.

'The dust we tread upon was once alive.'

'One of the greatest triumphs of the microscope has been to establish the unity of plan which prevails in organized structure. It is easy enough to say that the giant palm belongs to the vegetable kingdom, whilst the huge elephant

which browses at its roots is an animal; but as we descend the scale of the animal kingdom and at the same time examine vegetation of a complex organization, it is difficult to define the limits of the one or the other. In the earlier periods of Zoölogical Science, spontaneous motion and the presence of a stomach were considered as the distinguishing characteristics of an animal; but we now know that certain plants (*conserve*) possess the power of motion, and certain animals (sponges and allied families) are destitute of both. There was a time when nitrogen was assumed to be a distinct proof of the animal tissues, but it is now ascertained that nitrogenized matter necessarily belongs to the growth of the plants. The microscope, which was appealed to, to establish the differential line, proved that there is no distinctive character, and that all organized matter has a common origin. Who would have imagined that man has a common origin with the worm he treads upon! Who would have dreamt that the lordly lion, the crawling reptile, the majestic oak, the humble snowdrop, are all alike in the first elements! But it is true, that all animals and all plants spring from a primordial cell, which, in the vegetable kingdom continues to preserve its characters, and in the animal kingdom, undergoes a development into tissues—nerves, blood vessels, bone and muscle. A single cell is the first step in created life, and from the congeries of cells are developed those various parts of the noble casket which constitute man, and enclose his immortal spirit.

“In former times, the Anatomist was content to describe the position and relation of the organs of the body; but now the microscope penetrates into their hidden mysteries, reveals their minute structure, and reduces them to elementary tissues. It creates the science of Histology. Under its examination, the Past and the Present rise up as if by the enchanter's wand. Dig up from the rocks the tooth of a Preadamite animal, place a fragment under the lens, and the Naturalist reconstructs it, and gives you a picture of it as it existed in the days when there was no man to declare the glory of the Deity. Rivaling the fabled trial by bier-right, when the corpse of the victim was exhumed from its resting-place to confront the murderer, at whose dread touch its pure winding-sheet was reddened by the blood which poured forth from the

wound as it opened its gory mouth to convict the accused, the microscope declares that his stained garment is polluted with the blood of his fellow-man; and even when time has drawn a curtain over the dark deed, the microscope and test-tube detect the secret poison and unveils the crime.

"To the Pathologist, the microscope is of immense value. It detects the lithic acid, the oxalates, the phosphates, the fungi, pus corpuscles, blood corpuscles, tubercular matter, and minute entozoa. It will even display a flower-garden in the stomach; but it cannot show a cancer cell, for the simple reason that none exist, as my colleague, Dr. Linton, reasoned out years ago, and as has been clearly shown by Rokitsansky and others since.

"Wonderful are these revelations of the microscope! It teaches us that there is a hidden beauty in Nature all around us; it unrolls the scrolls of Time, and we read of the operations of Nature in ages gone by. But there are those who may ask, what is the use of such facts? They often ask, what is the use of any isolated facts in science? It is said when such a question was propounded to Benjamin Franklin, he replied by asking 'what is the use of a new-born baby?' No one could see the use of the infant philosopher when he was keeping his mother awake all night with the ills that babies are heirs to. Who would then have predicted his splendid discovery of the identity of lightning and electricity—his beautiful explanation of the action of the Leyden jar—his gift to mankind of the lightning rod? to say nothing of his aid to the great cause of American independence."

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#### "TO DELINQUENTS."

"A number of persons, here and there, have regularly received this Journal through the year, until about the tenth or eleventh number, and then either send us a single number marked "*Refused*," or have the P. M. do so for them. We shall not forget these 'high-toned' gentlemen."—*Cincinnati Med. Observer*.

Some such experience, we are sorry to say, (not so much on our own account,) has fallen to our lot; we are perfectly wil-

ling, and expect, to suffer loss in many ways connected with the publication of a journal, but it is always unpleasant to see manifestations of this character in a profession, all the members of which should be gentlemen; *we* shall not fail to recollect a few individuals of this class.

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*Effect of Carbonic Acid on the Gravid Uterus.*

The *Union Médicale*, for August 12, contains an account of a case in which carbonic acid gas, injected into the vagina, was successfully employed to effect premature delivery. The gas was generated into a glass vessel, by means of the action of acetic acid on the bicarbonate of soda, and conducted into the vagina by means of an elastic tube. A glass speculum was introduced into the vagina, and in order to prevent the carbonic acid from escaping too freely, the tube was passed through a cork which closed the external opening of the speculum. The injection of the acid was followed by a disagreeable pricking sensation in the vagina. After the third application, some pain was felt in the umbilical region, and the cervix uteri became softened. Six applications were made, of from twenty to thirty minutes each, one at night and one in the morning; after the last one, uterine contractions came on, and delivery followed. The result of this case is very satisfactory, so far as it goes, and is worthy of trial in cases where it becomes necessary to procure premature delivery, especially as it occasions no harm either to mother or child, and at the worst only causes the delay of a few days.—*Boston Med. and Surg. Journal.*

# A T L A N T A

## Medical and Surgical Journal.

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### ORIGINAL COMMUNICATIONS.

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#### ARTICLE I.

*Report of a remarkable case of Monstrosity, with a Surgical operation.* By E. C. MOYER, M. D.

TALBOTTON, GA., Dec. 15th, 1856.

J. P. LOGAN, M. D.,

*Dear Sir* :—In compliance with a promise made you last summer, I report you the following case of a Monstrous Fœtus. On the 20th day of March 1842, I was called to see a negro girl belonging to Mr. Stephen Harvey, two years of age. She, together with several of the servants of the family, had been suffering much from inflammatory fever of a continued form. The child's abdomen from birth had been large and prominent. Shortly after the attack of fever, her abdomen rapidly enlarged, and about the 20th day, an opening was formed about an half inch to the right of the umbilicus, which afforded an exit (to use the language of master and mistress) to about one peck of most offensive matter, containing large locks of hair. At the time I saw her, she was laboring under hectic fever—pulse 140—profuse night sweats and diarrhœa, and great emaciation. Upon a very careful investigation of the case, I decided that the abdomen contained the imperfect rudiments of a Fœtus, and that nothing but its removal by an operation could save the life of the child, and so expressed myself to the master, assuring him at the same time, in all probability, she would die from the operation, in consequence of her great debility and emaciation ; but that the operation afforded the only ground upon which to predicate a hope of her recovery. On the evening of the 23d, three days after, I performed the

operation, assisted by Dr's H. P. Smead, Thos. B. Turner and James Y. Gardner, in the presence of a number of the neighbors. I commenced by making a semi-lunar incision from a point even with, and just at the right of the umbilicus, passing the knife through the integuments and abdominal muscles down to within two inches of the symphysis pubis, doing which, a large sac or cyst was exposed to view; upon opening the cyst a mass covered with hair was seen in full view. I attempted its removal with my hand, but made a failure; I then seized it with a pair of fanged forceps, and again attempted its removal, but in doing which, one of the fangs broke in consequence of its firm adhesion to the sack posteriorly and inferiorly; on my second trial, I succeeded in the removal of a mass weighing 18 ounces, the upper portion of which, was covered with a thick coat of hair about three inches long. The undecayed portion of the funis was about two inches in length, attached to the centre of the mass, as in cases of newly born infants. At what point in the cyst the cord had been attached, I could not discover. There was a completely formed rectum, on either side of which, was a prominence of considerable size, designed evidently for the nates and hip joints; there were two appendages, evidently intended for an arm and an ear; there were cervical vertebræ, one of the articulations being exposed, evidently caused by the decay and discharge of whatever was attached to it. The mass had evidently retained vitality and continued to grow up to the time of the attack of fever, which was about two years from the child's birth. The sack was cleansed by injecting into it tepid milk and water. The edges of the incision were brought together and retained by adhesive straps, leaving a small opening at the pending portion for the escape of any matter or fluid which might collect in the cyst. The incision healed kindly by first intention, and under the liberal use of bark, wine, and aromatic sulph. acid, the patient rapidly recovered, and was discharged well in about ten days. She is now in her sixteenth year, as hale and healthy a girl as any in Talbot county. I preserved the preparation in alcohol, intending to present it to the Medical College of Augusta, Ga.; but some unprincipled person, not having the fear of God before them, stole it from my office.

## ARTICLE II.

*Report of a Complicated Case of Dislocation of the Knee Joint, with Remarks.* By V. H. TALIAFERRO, M. D., Atlanta, Ga.

Upon examination of the various records devoted to medical science, we find few indeed, comparatively, connected with Practical Surgery. This, no doubt, is owing to the scarcity of cases occurring to the greater number of practitioners, especially those of the country, where they are not so liable to rail road and machinery accidents as in large towns and cities. It may be owing, partly, also, to the fact, that physicians, whose minds must necessarily be divided upon the various branches of their profession, generally feel not entirely satisfied with their treatment of surgical cases.

The profession is too wont to select for record those cases alone which have been successfully treated. It is equally as important, that cases, unsuccessfully treated, should be made known to the profession, as it can be no proof that the treatment was unscientific, because unsuccessful. The physician's skill cannot turn aside the hand of destiny, or always shield from the stroke of death.

It is all-important to the physician, that there be kept a record of to-day's works, that the successor of to-morrow may have data in which to find the jewel, truth, that talisman which he may use for the amelioration of disease.

The acts, the thoughts, the ideas of the men of to-day, can have but little progressive influence on those of an after age, if not transmitted by pen or type.

Prof. Draper says: "Europe remained in a barbarous state until it obtained the means of perpetuating ideas; that is, to say, until it learned the art of writing."

This is an age when every thing must be utilitarian in its aspect, tendencies and results. So few articles have ever appeared upon medical record, in connection with injuries and diseases of the knee joint, I have thought it would not be uninteresting to the readers of your journal to devote a few of its pages to that important subject. More so, on account of their unfrequent occurrence; and, also, to elicit, if possible, the experience of the profession in relation to this subject.

Injuries of the knee joint, though of unfrequent occurrence, sometimes happen, even in the most retired sections, where the skill and inventive tact of the physician is called into action. As was truly remarked by a learned philosopher of medicine, that as much skill, as much care, and talent, and even more inventive genius, was requisite, in the treatment of a rustic's injury than in that of the city gentleman.

Man is subject to no accident which requires more prompt and efficient attention than injuries connected with the knee joint, especially its dislocation, as the time for remedy soon elapses, and marked deformity ensues. Sir Astley Cooper, in speaking of dislocation of this joint, has well remarked, "A considerable share of anatomical knowledge is requisite to detect the nature of these accidents, as well as to suggest the best means of reduction; and it is much to be lamented that our students neglect to inform themselves sufficiently of the structure of the joints. They often dissect the muscles of the limb with great neatness and minuteness, then throw it away without any examination of the ligaments, the knowledge of which, in a surgical point of view, is of such great importance."

It will not be improper here to examine casually the anatomy of the knee joint. We have, first, the condyles of the femur, and proximal extremities of the tibia, making one of the largest and most complicated joints in the human structure. That the joint might be complete—that the space between the articular surfaces be filled—a bone was necessary in the tendons of the extensor muscles of the leg, so as to facilitate standing; also, that the joint might have great strength and firmness, the patella a sesamoid bone, with the ligamentum patellæ for its inferior, and tendons of the extensor muscles for its superior attachment, plays an important part in the office of the joint. From the size, complicity, great articular strength, and peculiarity of the adaptation of the heads of the bones, which forms the knee, it is liable to a variety of maladies, and to both internal and external injuries. It plays an important part in the locomotion of the body, in the osseous and muscular structure, and is highly worthy of notice in a surgical point of view. The surfaces of the bones, which make this joint, (inferior extremity of the femur and superior extremity of the tibia,) instead of being accurately joined together, are only placed in juxta-



position, the attachment being ligamentous and cartilaginous, the crucial ligaments and external and internal semilunar cartilages serving an important part in the union.

The articulation of this joint, having distinct cavities, with corresponding convexities, might be called double, also making it opposed in a great degree to lateral and rotatory motion. Since these motions are scarcely appreciable, the joint formed by the condyles of the femur and articular surface of tibia would be classed among the regular ginglymoid.

The tissues of the joint are numerous, and are denominated the cellular, fibrous and fibro cartilaginous. The synovial capsule of the knee joint proper is the largest in the body. Between the tendons of the patella and surface of the os femoris is a "cul de sac," forming a distinct synovial capsule. This elongation of the synovial membrane is greater under the vastus externus than the vastus internus.

The ligaments of the knee joint are ten in number, viz: The semilunar cartilages, the anterior and posterior cervical ligaments, the ligamentum mucosum, ligamenta alaria, long and short external and internal ligaments, the capsular ligament, and ligamentum patellæ. The origin, insertion, &c., of these, it is now unnecessary to give, as it would be tedious and not important to our present purpose. These ligaments serve to hold the knee joint in continuity, and prevent its extension beyond a straight line with the femur, and also to confine its movements alone to that of flexion and extension.

The knee joint is surrounded not only by its ligaments, but by an aponeurosis, formed by an expansion of the fascia lata, also by the expansion of the tendons of several other muscles. To these there are joined a fibrous lamina, arising from the conjoined tendons of the vasti muscles. There is also a sub-synovial adipose tissue, situated behind the ligamentum patellæ, which fills the space behind the patella and synovial membrane. The number and extent of the ligaments and tendons connected with the articulating surface of the knee joint, the spine of the tibia entering the inferior condyloid fossa, its width of articular surface and the patella, renders it the strongest joint in the human system, also more liable to the most grave and serious diseases, such as Synovitis, Caries of the bone, Exostosis, Arthritis, and Hydrops articularum.

The cervical and lateral ligaments of this joint limit extension and flexion, hence in its luxation, their rupture must take place. Increased thickness of the internal semi-lunar cartilages, produces a deformity which we frequently see, especially among the negro race. It is sometimes so great that when the knees are brought together, the feet are thrown many inches apart; in some only one, in others both joints are thus affected.

The luxations of this joint are complete and incomplete; those which are forward and backward, of the former; those which are internal and external or lateral, of the latter variety.

In dislocations of the tibia backwards, there is shortening of the limb; the head of the tibia rests in the popliteal space; immediately above the ligamentum patellæ there is a depression and a corresponding protuberance on the opposite side.

In dislocation of the tibia forwards, the os femoris is thrown backwards; the tibia and patella are drawn forward and upward by the action of the quadriceps muscles. The dislocation backwards and forwards are more generally complete than otherwise. In the internal lateral displacements, the external condyle rests upon the internal fossa of the tibia, and vice versa; the internal or external displacement being indicated by the position of the protuberance. From the anatomy of the knee, we see at once the impossibility of a luxation taking place without a lesion of some of its tissues, especially that of the cervical and lateral ligaments. Owing to the strength of this joint, much force is requisite to displace its bones: so much so, that the injury rarely occurs without the loss of the limb, and the lesion is such as frequently to hazard the life of the patient. When the displacement is complete, as in all ginglymoid joints, very many of the tissues must necessarily be ruptured.

In dislocation of the tibia forwards, the projection of the os femoris backwards may overstretch and even lacerate the popliteal artery.

In all injuries, by displacement of the bones forming a ginglymoid joint, there must be more or less loss of mobility. If the luxation of the joint be complete, then must anchylosis be complete. Although the reduction in this variety of joint be more easily accomplished than any others, our prognosis will

always be unfavorable, unless the injury indeed be slight. A partial luxation of the knee joint is not always attended with danger; but if it be at all complicated, fatal consequences may supervene. I remember to have seen but one case reported of recovery from compound luxation of the knee joint. This case was reported by Dr. B. O. Jones, in your Journal of 1855. This case should teach us that all compound dislocations of the knee do not require immediate amputation.

Liston says, "Most frequently fracture is concomitant, perhaps with wound; and such accidents require amputation, either primarily or secondarily." He also says, that under more favorable circumstances, "The joint will remain long weak and never recover entirely." The indications are:

- 1st. Reduction of dislocation.
- 2d. Prevent or control inflammation.
- 3d. Promote the union of torn ligaments.
- 4th. Prevent ankylosis.

The reduction of the joint should, of course, be accomplished as soon as possible; this may be done generally with little or no difficulty, in consequence of the rupture of the ligamentous structure. If, however, difficulties present themselves from spasmodic action of the muscles, pullies may be requisite, or what is preferable, Dr. Jarvis' adjuster, which affords the means of making the most efficient extension. In luxations of ginglymoid joints, generally, little or no difficulty will attend their reduction; after the replacement, a roller or bandage should be applied to the whole extent of the limb; and if the external injuries would admit, splints should be applied. When the muscles surrounding the joint are lacerated or otherwise injured, the use of splints may be improper; under these circumstances the limb should, after bandaging, be confined to an inclined plane, by bandaging first the foot and then the leg to the plane.

2d indication, will be to control inflammatory action in the joint, which is very important to the patient's recovery. The limb should be kept at perfect rest, while cold applications should be continually made. If general excitement becomes intense, it will be necessary to use antiphlogistic remedies; such as tartarized antimony and laxatives to the bowels. It will also be necessary that the nervous system become not too

much excited ; that opiates be occasionally administered ; venesection may be requisite, but unless imperatively so, should be avoided.

3d indication, is to promote the union of the torn ligaments. In this our efforts will be alone directed to nature's assistance. The limb should be kept at rest, the patient composed, and inflammation subdued ; after which it may be necessary to use stimulating applications to the surface of the joint. The adhesion of torn ligaments *must* be a slow process, and many months will be required for their firm adhesion.

4th indication, is to prevent stiffness of the joint: this will rarely be effected. Passive motion commenced, after the subsidence of inflammation, and regularly kept up, affords the only means by which ankylosis may be prevented.

In connection with the preceding remarks, I will mention a case which occurred in my practice some two years ago. A gentleman was thrown from his horse while on his way from the plough ; his foot became entangled in the harness, and he was dragged a considerable distance, at full speed of the horse.

I was called to see him some six or eight hours after the accident, when I found him in a very deplorable condition, with his knee joint completely dislocated.

I could not tell what the direction of the dislocation first was, for so complete was the rupture of the ligaments and cartilages connecting the joint, that I could, with a slight effort, place the joint in any position I desired.

When I first saw him, however, the external condyle of the right knee was resting upon the inner articular surface of the tibia ; but I could, with ease, change the position by moving the internal condyle upon the external articular surface.

The forward and backward luxations could, with the same facility, be made. The patella was thrown far back upon the outer surface of the external condyle, its reduction being far more tedious than that of the joint.

Thus we see, there must have been very great laceration of the tissues of the joint ; the muscles around the joint were also bruised and lacerated, together with many bruises upon different parts of the body. Under all the circumstances, I was extremely fearful the patient would succumb to the inflammatory excitement which must inevitably ensue. After the reduction

of the joint and patella, a roller bandage was applied to the whole extent of the limb, securing the patella in its place by pads.

I was fearful of the application of splints, and used, instead, an inclined plane, (to which the limb was securely bandaged,) the foot, at the same time, being well attached to the foot pieces at the extremity of the plane. After the joint was made comfortable and the face dressed, which was considerably bruised, I commenced at once the antiphlogistic treatment, by first giving him a laxative, and succeeding its action, by the use of tartarized antimony and opium. The cold water dressing was continually kept to the joint, by which means it was never allowed to become hot.

In three or four weeks passive motion was commenced, to as great an extent as the pains it produced would allow. I was well satisfied the joint must be stiff, and placed it in that position which was the most convenient. Several months elapsed, and yet the ligaments were not sufficiently united to prevent slight motion upward and downward by pressure upon the joint.

The patient, worn out with his confinement, left his bed, while yet the joint was not firm in its natural position. The consequence was, that the head of the tibia fell a little backward, in which position the limb recovered, leaving a slight deformity; ankylosis was of course complete.

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### ARTICLE III.

*Homœopathy.* By ROBERT E. CAMPBELL, M. D., Benton, Lowndes County, Alabama.

[CONTINUED FROM PAGE 198.]

The dogma of "*similia similibus curanter*" has received some farcical applications, and introduced into the homœopathic pharmacy, substances which can only be tolerated in ordinary stomachs in the 6,000th dilution. It is announced, with "a feeling of inward satisfaction," by Dr. (?) Muir, that he has rendered "a real service to the theory and practice of medicine;" for, by deep research into the mysterious laws of Nature, he has unlocked one of the "wonderful coincidences"

of the aforesaid *Dame*, and discovered a most valuable specific for various infantile diseases—most especially for *itch*.

The aforesaid Dr. M. made a very extraordinary observation, that the heads of children were frequently the geographical seat of insectile occupation, which was attended by a peculiar sensation very similar to that experienced about the knuckles when colonized by a race of subcutaneous inhabitants. These startling facts set the brain of the *Dr.* to itching. Surely, thought he, these curious creatures were not made in vain; hence they were made for something. Now, as to what that *something* was; and the fertile brain of the sagacious *Dr.* was not long at a loss; for, he argued that they were indigenous to children, and therefore, they must be good for children! Sublime theory! Newton, in his palmiest days, has been distanced by a modern Dr. (?) But to return. The Dr. went on tracing the striking analogy: he argued that they were products of the body of the child, yet they did no good *outside*, and, as a matter of course, they must do some *within*. Without more ado, one of these quiet colonies was invaded, suitable specimens captured by the *Dr.*, (who seems to have been a connoisseur,) a “*tea*” was concocted, and he began his experiments. Symptoms were observed in the *stomach* (*nausea*?), head (*crawling*?), skin (*itching*?), etc.; and according to *Dr.* Simpson, he devotes twelve pages to a description of these *startling* symptoms. Twelve pages to record the infinitesimal powers of lice. But, Dr. Muir is not the only genius who has enlivened the pages of the *materia medica* by his researches into animated nature.

One of the *followers*, I know not who, startled the *infinitesimal world*, by the announcement, that the itch insect, triturated with sugar, had been found eminently useful for “tingling digits;” and those horrible pests to nude and weary humanity, yclept “*bugs*,” when sufficiently sweetened or dissolved, (for which purpose infinite sugar and universal water hardly seem adequate,) are declared to be “a sovereign balm for their own venomous stings.” We must confess there is a grim satisfaction in thus turning the tables upon the vermin. There is a vindictive pleasure in seeing “the biter bit,” and we must all allow the infinitesimals to wage a war of extermination upon “*bugs*.” And every homœopathic Dr. should seize upon all

occasions to fill his bottle: then his visits to the nursery would not be without some good result.

The homœopathic publications publish many other substances equally disgusting, but we will spare our readers the nauseous information; yet, at the same time, we would beg our fastidious friends of both sexes, not to ask any questions of their homœopathic physicians as to the contents of his infinite pills; for

"Where ignorance is bliss, 'tis folly to be wise."

We have heretofore noticed the conceit of Hahnemann, that most, if not all, the diseases to which frail humanity are liable, are attributable to the obscure constitutional workings of the *psora* or itch insect. It is and will be a mystery, deep and unfathomable, how the great philosopher arrived at this conclusion—by what process of reasoning he satisfied himself (?) of the plausibility of his startling theory. Hahnemann, in his "*Organon*," says he "spent twelve years in finding out this thousand headed monster of disease," which he finally found out to be the cause of "nervous debility, hysteria, hypochondriasis, mania, melancholia, imbecility, madness, epilepsy, convulsions, mollities ossium, cancer, gout, jaundice, dropsy, hemorrhages, deafness, blindness, palsy," etc., etc. How grateful should we be to Hahnemann for thus finding a specific for most human maladies; and how fortunate that so benevolent a provision for mankind is found in the heads of children! And how sad to think of the wanton destruction, nay, butchering, of the useful insect by unreflecting mothers! Down with the ignorant and shameful device of combs; lay an injunction on thumb and finger; send every suspected head to the Doctor to be looked at, and let poor afflicted man have dealt out to him his allotted portion of "tea!"

A thousand striking "coincidences," never before understood, now begin to unfold themselves, showing the obscure workings of a grand truth before unperceived! Has not man always expected suggestions to come from the head? Does he not, when in perplexity, scratch his scalp? In mania, does he not tear his hair? In melancholia, etc., does not a blister there imitate *pediculoid* irritation? Is not a doctor a *lice-entiate*? Is not the extreme of calamity expressed, by "as dead as a nit?" What will be thought of these "coincidences" we are unable to say, yet, if there is not a deep and mysterious mean-

ing in them, we know not what is to become of the law of "*similia similibus*," for no homœopathic resemblances are so striking as those above recorded.

But homœopathy has shed its light on moral and religious, as well as on physical and animated things; and a sort of phosphorescent gleam it is. The first great truth discerned by it was, that Hahnemann was inspired, and Homœopathy a revelation; that "the new evangelist" was sent "to render medicine, like other sciences, properly Christian!" And we are gravely informed, that he has faithfully executed his commission, and "through him Christian science became universal, and redemption descended from the dominion of sentiment to that of the ideas of intelligence."

We confess the above quoted paragraph is very obscure; we cannot get the clue to it, unless it is meant by "Christian science" the art of catching and tea-drawing the universal remedy; and "redemption descending from the dominion of sentiment, to that of ideas and intelligence," may mean the transfer of the happy conception of Dr. Muir, to actual manipulations upon the seat of intelligence of one of his children. Dr. Muir, who is himself pronounced to be an "apostle of homœopathy," says, that "homœopathy is not a science, merely, but also for those who comprehend it, a sublime devotion; a form of religion; a divine rainbow of union, holding out to mankind the promise of speedy regeneration." We must spare our readers his argument in favor of the divinity of the system, from the idea of the infinity suggested by its doses. The crack-brained man actually perceives no difference between infinite emptiness and infinite fullness. But enough of Dr. Muir; we have used him *ad nauseam usque*.

The attempt to connect homœopathy with religion, and to promulgate a system of blasphemous infidelity, under the name of a newly developed Christianity, is by no means confined to a few crazy transcendentalists, who can manage to write in appropriate German and French. The *English* homœopathic journals furnish us with melancholy evidences of the spread of the infection in the land of bibles. Professor Simpson has furnished us with several quotations upon the subject in his valuable work against the homœopaths, to which we must refer our readers. We have only to add, that homœo-



pathic religion is worthy of homœopathic physic—equally true, reasonable and effective.

We now await the next folly ; can it equal the last ?

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#### ARTICLE IV.

*Report from the Case-Book of THOS. S. POWELL, M. D., Sparta, Georgia.*

DRS. LOGAN & WESTMORELAND—I am aware that the utility of publishing isolated cases of disease has been much questioned, especially by some of our city *literati* of the profession. But while I would not say aught against those who have the time, talents and industry to give publicity to elaborate and scientific articles, I must say, that the archives of medical science would not be so replete with useful and practical knowledge, were it not for the many detached facts and observations found in the report of cases as they occur in general practice.

I will offer no further apology for placing a brief report of several cases of Pneumonia, from my Case-Book, at your disposal, to be published or not, at your discretion.

CASE 1. A large, robust negro boy, 18 years of age, had been indisposed for several days, with simple catarrh ; on the 5th November, was exposed to the wet and cold, picking cotton ; was attacked next morning about ten o'clock, with a chill ; took his bed at night ; fever very high ; cough dry and distressing. His master gave him three Moffat's pills. Seven o'clock, A.M. Cough no better ; fever supposed to be not quite so high ; pills had operated several times. Three o'clock, P. M. Worse ; more fever ; cough more troublesome. I was sent for ; saw him at 6 o'clock. Condition—suffering with severe headache ; conjunctiva highly injected ; tumid ; skin hot and dry ; pulse 120 per minute, full and bounding ; cough almost incessant ; expectoration tenacious, and much streaked with blood. Left syr. prun. virg., and ordered one tablespoonful to be given every two hours, counting the pulse at the time, and if above 90, to add 4 drops of veratrum viride. Flax seed infusion to be drank *ad libitum*.

Eight o'clock, A. M. Cough not so troublesome; expectorating more freely, and less blood; pulse 104; had been decreasing since 2 o'clock; gave 20 grains quinine and 30 drops of laudanum at once; ordered the syr. and veratrum to be continued, with the same proviso: by 11 o'clock, A. M., patient much improved; no pain; cough not so troublesome; pulse 90; skin soft and moist; gave no more quinine; directed the syr. prun. virg. to be continued until the cough subsided; adding 4 drops of veratrum when the pulse exceeded 80 or 85 per minute.

In a few days Mr. L. came to town and informed me that Isaac was rapidly recovering; had not taken any veratrum since the day after I saw him. He is now able to walk about the yard; coughs a little; sent him another bottle of the syrup.

CASE 2. On the 8th of November, I was called to see Ellen, a negro woman, belonging to Wm. L., aged 22, stout and well made. Saw her at 2 o'clock, P. M. Her situation was as follows: Pulse 136, and small; skin dry; respiration frequent and laborious; unable to turn herself in bed; nervous system perfectly prostrated; tongue coated, but moist; cough frequent, dry and hard; ordered two tablespoonsful of the syr. prun. virg. with three drops of veratrum every two hours; the latter to be omitted after the pulse was reduced to 100 per minute.

9th—7 o'clock, P. M. Patient passed a restless night; pulse, the first part of the night, as high as 160; pulse now 130; no perceptible amendment, except that the pulse and skin are a little softer. Gave 20 grains quinine and 20 gtt. tinct. opii. at once, in half cup of warm sage tea. The syr. and veratrum to be continued.

10th—10 o'clock, A. M. Patient very much improved in every respect; pulse 72; respiration easy; skin moist; cough loose, and expectorating freely; gave no more quinine; ordered the syr. to be continued, with perfect rest and a soup diet.

12th—P. M. Much improved; pulse had not exceeded 80 since my last visit. Advised the syr. to be continued until the cough subsided. In a week Ellen was well.

CASE 3. On the 9th of October, I was requested by Mr. W. to call and see a little negro girl about 10 years of age; saw her at 3 o'clock, P. M.; found her with a high fever; intense pain in the right side and chest; pulse 156; respiration quick;

skin dry; cough hard; expectoration bloody. She had also been purged with Moffat's pills, as all are who dare complain in that neighborhood. Ordered one teaspoonful of the syr. prun. virg., with one drop of veratrum, every two hours, as long as the pulse exceeded 100 per minute. Flax seed infusion to be drank *ad libitum*.

10th—8 o'clock. Patient better in some respects; pulse the same, 156; skin much softer; respiration easier; cough not so frequent. Gave 15 grs. quinine and 10 gtt. tinct. opii. in half cup of warm sage tea at once; syrup and veratrum to be continued as before. 11th—11 o'clock, A. M. Much improved; pulse 95, and soft; skin moist. Gave no more quinine; ordered the syrup to be continued for several days, adding the veratrum every four hours, as long as the pulse exceeded 95 per minute. She recovered rapidly.

CASE 4. Bob, an old negro, 50 years of age, informed his master on the 16th of January last, that he was sick, and had been very unwell for a week; complained of headache, and a severe pain in the right side, and in the mammary region of the chest, particularly when he drew a deep inspiration or coughed. His master gave him a dose of oil, and ordered him to live light and remain in doors a few days. On the 22d, I was sent for; found him with high fever; complaining of great pain and oppression in the chest; respiration short and quick; cough frequent; expectoration viscid and rusty colored. Gave calomel 5 grs., Dover powders 5 grs., and ordered one tablespoonful of the syr. prun. virg., to be given every two hours; and 4 drops of veratrum viride to be added as long as the pulse exceeded 100 per minute. 23d—8 o'clock, A. M. No perceptible change, except the skin was softer. Gave 20 grs. quinine in half cup of warm sage tea at once, and ordered the previous treatment to be continued. 24th—8 o'clock. Less fever; some amendment in all of the symptoms; perspired freely the evening before; spent a more comfortable night; repeated quinine; continued the syrup and veratrum. 25th—10 o'clock. Bob is much improved; pulse 90 per minute. Gave 10 grs. quinine, and ordered the syrup to be continued for several days, and discontinue the veratrum. In ten or twelve days, Bob was well.

REMARKS.—I have the notes of a number of other cases

similar to the above, but presume it unnecessary to detail them, all of which were successfully treated with quinine. I do not recommend it as the *sine qua non* in every climate, and in all the numerous varieties of this disease, but as a valuable auxiliary to other remedies in all cases in malarious districts, particularly when the fever manifests the least tendency to a remittent type.

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## ARTICLE V.

*What is the matter? or Report of a case by* DR. JOHN COSTON,  
*White House, Henry Co., Ga.*

MESSRS EDITORS.—It may be thought strange that I should attempt the report of a case under the above caption ; but perhaps you may discover before I am done, that it is easier to ask than to answer the question ; but my desire is to elicit an answer from you or some of your contributors, and especially as the case is still on hand, and if any thing can be done for the relief of the patient, I am anxious to be directed in the proper course. Milton G., aged 5 years, strumous constitution, but well grown and apparently healthy up to last April ; about that time exhibited the evidences of disease, by fretfulness and voracity of appetite, which continued to increase, with the addition of other abnormal manifestations until July, when I accidentally saw him while attending another member of the family. Upon examination, I found him in the following condition : his eyes, which were formerly straight, now squinted badly, and presented an idiotic expression ; his speech formerly quick, was now hesitating, so much so as to require as much time to articulate a monosyllable as formerly to speak several words ; his head enlarged generally, with a puffy appearance, though quite firm to the touch. In addition to the above, his appetite continued to be insatiable.

On the 2d of August, I was requested to see him regularly, and found the symptoms greatly aggravated ; the blood-vessels of the head were greatly distended, and appeared as if the blood was coagulated in them, resembling dark cords under the integument.

August 14th—No improvement in his symptoms and becoming very restless. I applied a blister to the back of the neck, which had the effect of quieting him considerably, and reducing the puffed condition of the head to some extent; he continued in about the same condition until the 19th of August, when he was found to be somewhat Amaurotic, and on the 22d, was evidently laboring under complete Amaurosis; from this period, up to the 28th September, there was no material change in his condition, about which date his appetite failed for the first time, and after this he ate but little.

About this period, some spasmodic action manifested itself, affecting principally the extremities; he gradually became very much emaciated, and about the 15th of October he lost the power of speech and hearing, which continued for about 8 days, when the speech, hearing and appetite returned; in a few days, however, he became exceedingly restless, and continued almost constantly to cry out for food: his limbs now became rigidly flexed, his left hand was drawn up near the chin, his wrist drawn inwardly, thumb drawn across the palm of the hand, and fingers tightly clenched; his right arm was drawn in a somewhat similar way, though not to the same extent, some little use of the hand being retained; his left thigh was drawn upon the abdomen, and the leg was flexed upon the thigh; the ankle was drawn inwards and downwards; the toes were drawn entirely under the feet; the right leg and foot were also in a somewhat similar condition, though not to the same extent. With occasional changes of a slight character, he has continued in about the same condition, up to the present time.

You will perceive that the condition of the stomach, bowels, and urinary organs has not been referred to, and for the reason that no important deviation from the state of health was observed, farther than the morbid appetite may have had connection with an abnormal condition of the stomach.

You will also perceive that I have said nothing of the treatment instituted, save the application of a blister to the nape of the neck, and for the reason, that this was the only remedy that seemed to have the slightest influence over the course of the disease, and on this account might possibly throw some light on the true pathology of the case.

## ARTICLE VI.

From the Archives Generales.

*The Syphilisation of Children.* By B. W. BOECK, Professor de Medicine, à l'Université de Christiana. Translated by J. J. West, M. D., Dem. Anatomy, Savannah Medical College.

Syphilisation, one of the most beautiful discoveries of our time, has found none but opponents. The Academy of Medicine of Paris, has battered in the breach this new theory, without having sufficient elements of decision. A great number of physicians have followed blindly its judgment; and, having once taken sides, they have rejected the doctrine as ridiculous, without calling in the aid of experience. However, the therapeutic agents, which are employed to combat Syphilis, are neither sufficiently infallible, nor so exempt from inconveniences that we should not encourage honest attempts, however paradoxical they may appear at first sight. If observers had desired to follow serious experiments, they would have acquired a conviction of the reality of Syphilisation and its good effects.

Since the day the method was first known to me, I have undertaken a series of uninterrupted researches: my first trials, by the concurrence of different circumstances, date only from the year 1852. The results which I obtained and which I have already noticed in former publications, can be resuméed thus:

1st. Inoculation of the syphilitic virus, sufficiently prolonged, determines an absolute immunity.

2d. The syphilitic manifestations which are produced at the commencement of syphilisation disappear, however long the inoculations may be continued.

3d. The general health is in no way altered by syphilisation; on the contrary, the patient feels himself better than before the treatment.

These conclusions, arrived at since 1854, have served me as a point of departure for ulterior researches. Although the principal end of this memoir is, as indicated by the title, to treat of syphilisation, specially upon infants, I think it useful to expose, in a few words, the observations, which, in the last

two years, I have instituted upon adults. Besides, that some explanations may not be useless to French readers, they will assist to judge of the actual state of individuals syphilised, and of their liability to a recurrence of the disease.

I have treated in the last two years 63 persons, of whom 36 had never been submitted to any medication, and 27 had followed a mercurial treatment. It is superfluous, I hope, to state, that I only employ syphilisation for persons affected by constitutional syphilis; and, consequently, I introduce into the organism only the morbid elements it has already received. I have always been the declared adversary of prophylactic syphilisation. It is, I think, an absurd idea, to pretend to preserve men from a malady which they contract only by an act of their own will. Nothing is changed in the mode of syphilisation I have employed thus far.

I take the matter of a primitive chancre, and inoculate it into the patient by the arms and thighs; most frequently, I make three upon each arm and thigh. However, I have, in some cases, inoculated upon the sides of the chest, instead of the place of election adopted by Sperino, so that the cicatrices may be less apparent. The choice of the part of the body that one inoculates is not indifferent. Upon the arms and breast the inoculations are smaller, and of shorter duration than upon the thighs; and save rare exceptions, it is there I inoculate by preference. I employ, ordinarily, the matter of previous inoculations, for those that are practiced subsequently. If the last inoculations have not taken well, I do not hesitate to have recourse to the pus of anterior ones. In some cases I have served myself, only of ulcerations, dating from the commencement of the syphilisation, inasmuch as if they furnish an inoculable pus, supposing that the matter was active, the treatment should be shorter. I have not, as yet, experimented enough to know whether or not this supposition is well founded; but the question is important, and merits that I return to it later in detail. It often happens in our country, that, when one takes the virus to inoculate it upon persons who have contracted their chancres abroad, the ulcerations are extensive, and become phagedenic; but there is no reason to be alarmed at this; on the contrary, it must be persevered in. Even should the series of inoculation be interrupted, the phageden-

ism makes a progress that would be infallibly arrested by the syphilisation. If we employ a matter modified by transmission through different individuals, and by successive inoculations, the ulcerations never assume the phagedenic character, and it is thus, that in the last few months, not having at my disposal the fresh virus, I have not observed a single phagedenic ulcer upon those persons I have inoculated. I have concluded from this, that it would be well to employ always in the commencement of syphilisation, a matter which has passed through several inoculations, and to continue this until the syphilitic susceptibility has been somewhat enfeebled. Is this matter less energetic, less syphilising? Should the syphilisation be practiced for a longer time? These are questions difficult of solution, yet I am inclined towards the negative.

When one matter ceases to give a satisfactory result, I have had recourse to another; and thus on until I could find inoculable pus. In inoculating in this way, each patient has had more than a hundred chancres, and a large number have passed that figure considerably. Let us hasten to add, that among these hundred chancres, can be counted rarely more than twenty or thirty of any extent, or which leave evident cicatrices; the others reduce themselves to simple excoriations. It is sufficiently probable, that these last inoculations, which do not produce characteristic ulcers, are not indispensable to the success of the treatment. However, I have always insisted upon this practice; either to study well the action of the virus, or because it is necessary when a method is new to multiply guaranties. It is equally probable, that one would be able to dispense with a repetition of twelve inoculations every three days, and give a longer space of time between them. Perhaps a small number of inoculations might suffice for thorough syphilisation, but the treatment, as I have employed it, has succeeded, and I have feared, lest in changing it, the results might be injured.

Two or three months are generally necessary to render the last inoculations entirely negative. After that time the immunity is perfect—should one inoculate the virus of syphilis or distilled water, the effect would be the same—nothing. This law suffers no exceptions, and the incredulous may convince themselves with facility.



The mode of operating once exposed, I return to the principal points of doctrine which it raises, or which are attached to it. And, first, has the syphilitic matter invariably the same activity, the same force? I have already discussed elsewhere this grave problem, and without pretending to arrive at definite conclusions, I will signalize the following facts which observation furnishes :

1st. It is certain that the individuality of the patient plays a grand roll—this is noticed by inoculating the same primitive virus upon several persons.

2d. When there is a series of successive generations of inoculated chancres, the first give a pus sensibly more active than that of ulterior generations.

3d. If the properties of the inoculable matter are nearly exhausted in an individual syphilised, and one inoculates with this virus, an individual attacked by constitutional syphilis, but not yet submitted to treatment, or at the beginning of medication, the pustules are much more voluminous than those from which the virus is taken. If later, one employs this regenerated pus, and transplants it upon one undergoing syphilisation, it gives place to more intense manifestations. I have noticed elsewhere, that it may happen otherwise. Thus, the virulent matter, active in one person is inoculated into another, it appears to act fully at first, but after several inoculations with the same pus, the action becomes much more lively.

Dr. Clore has issued, lately, new views upon the qualities of syphilitic virus, according as the chancre is or is not indurated. The experiments which I have undertaken, upon a large scale, have not resulted precisely according to his opinion, and do not permit me to admit the absolute distinction between the simple chancre or chancroide, and the indurated chancre. It results from numerous statements, at least among us in Norway, that chancres contracted abroad, or those which are produced from them, but little time after returning to the country, are the only inoculable; at the same time that we had the inoculable chancres, we often observed suppurated buboes. The season of the year when inoculable chancres and buboes existed together, lasted from spring to the end of summer, the winter was passed, almost, always without its being possible to obtain positive results by inoculation from any

kind of chancre; however, there was, during the months of winter, chancres noninoculable, which became indurated, and were followed by constitutional syphilis.

One question, still more grave, is the preservative virtue of syphilisation. How long will the immunity last? Is it equal to that given by vaccination? Is it as durable? Does it differ in its nature or effects? The answer is difficult. We cannot, I think, take artificial inoculation as a criterion, and I have not dared to undertake experiments under another form, the cure of syphilis not implying an inaptitude to contract anew the malady. The law of Mr. Ricord, that constitutional syphilis does not attack the same person twice, does not find here its application, if it is admitted that syphilisation has completely annulled, as I believe, the virus in the economy.

I have already indicated that when mercury has been administered before syphilisation, one is not sure of a guarantee against a recurrence, although it may have a very slight intensity. In these cases, if the inoculations give insufficient results, it is not rare that one obtains pustules and ulcers more extensive after the employment of iodine. In mercurialised individuals, I have repeated the inoculations after a certain lapse of time, and each time with positive effects; but I have always given iodine in the intervals.

We have in syphilisation, not only a remarkable physiological fact, but hundreds of observations exist to prove that syphilitic symptoms, exhibited in the commencement of syphilisation, disappear little by little as the inoculations are multiplied. This effect is produced more or less rapidly: the cure can only be effected after several months, but it is certain, and does not leave to the physician a moment of hesitation.

Should it be now demanded, why a practice so efficacious has not acquired more credit, the answers are numerous. I have no need to insist upon the opposition met in their origin by ideas which contradict either common feeling or received opinions; one would not have to search far to find analogous laws in the pathology of other inoculations. The most powerful objections arise from the fact, that the influence of the mercurial treatment and the obstacles it presents to syphilisation, have not been appreciated at their true value. By a happy chance of the two first patients whom I treated by this

method, one had been already treated by mercury, the other, on the contrary, had not undergone any medication. In the first, accidents resisted more or less : in the other, the success was all otherwise decisive. These results led me to suppose that anterior treatment presents obstacles to the effect of syphilisation, and since then experience has transformed, for me, this hypothesis into a certitude. When mercury has not been administered, the phenomena succeed regularly ; they are continually decreasing until towards the third month, they entirely disappear. The duration of the treatment depends, besides, on that of the constitutional infection. I have already signalized the restrictions to this general rule, and recalled the case of individuals on whom are seen to reappear, during the treatment, eruptions analogous to those which existed at the moment of syphilisation. These phenomena are insignificant ; they are effaced of themselves, at the end of a few weeks, and I have seen them so frequently appear and disappear that I never permit them to occupy my attention. It can be said, that the only inconvenience they present is to cause a larger sojourn of the patient in the hospital, and to give rise to the belief that syphilisation requires a longer time than it does. It would be wrong to characterize these accidents as *recidives* ; their short duration, their spontaneous cessation, show clearly that they are not really syphilitic. One comprehends that, in private practice, these *reminiscences* are of no value, the patients being reassured abstaining from all other treatment. Syphilisation appears to them much more easily supported than a mercurial course ; it leaves them at liberty to attend to their affairs ; does not force them to abstain from any pleasure ; and demands no other regimen than to avoid the use of too generous wines. The syphilised has no precautions to take against atmospheric variations, and excitants of any kind do not act disadvantageously. Finally, I must proclaim again, that among individuals syphilised, and who have never previously submitted to a course of mercurial treatment, I have not observed a single case of recurrence of the disease, although many have quitted the hospital for more than three years. I pass now to the second class of the syphilised : those who have followed a mercurial treatment, with intention not to neglect any of the details which the subject, too little known, will admit of.

Certain physicians, without having against syphilisation an absolute repulsion, regard it as a last anchor of safety, when every other remedy has been exhausted—mercury, preparations of iodine, &c. Now there are doubts which exist still on the veritable anti-syphilitic powers of mercury; every one knows that mercurial treatments, the most rigorously followed, are far from always preventing a recurrence of the disease. The recidives occurs after the lapse of weeks or even years, under the form of accidents well defined and peculiar to syphilis, either as nervous troubles, hyperesthesia, paralysis or mental alienation; at other times, the patient has acquired a personal immunity; but the children who are born of him bear the too evident stigmas of syphilis, and witness that the evil has not been exhausted in its distant source.

Perhaps it will not be malapropos to mention some of the cases which I have under the eye at the time I write. The first is a man of 36 years, having suffered during fourteen years from syphilis, and submitted one after another to a series of mercurial treatments; the palatine arch is destroyed, almost every bone is the seat of exostoses, the constitution is altered to a high degree, or at least such was his state before syphilisation. Next, a man of 28 years, infected during seven years, hemiplegic several months in spite of assiduous treatment. A young girl of 21 years, who has been recently treated for and cured of a constitutional syphilis. She appeared healthy and robust, but her infant, aged six months, has been attacked by the malady, which has also reappeared in the mother. A woman of 30 years, submitted to all the severity of the method of Dzondi, and reputed perfectly cured; her first infant was still born, the second lived one day, the third eleven days, the fourth has become syphilitic at five weeks; this last has been syphilised, and will be referred to again. Finally, a woman of 41 years, not less actively treated, of whom the children have all died at the end of a few days, and who is herself hemiplegic. I could well extend this sad list, and no where is one more struck with the insufficient result of treatment, than in a little country like ours, where the patient seldom ever escapes the indefinite control of the physician. If in presence of these daily observations, repeated in spite of the care exercised, to vary the mode of employment of a remedy,

we find another means exempt from the same dangers, is it wise, is it humane to prescribe it? When I represent to myself, the influence exercised by mercury, I am constrained to demand, if it would not be better to remove, entirely, the syphilisation of subjects treated by that remedy. The field for the action of therapeutic agents, is no more the same. We combat not only the disease, but syphilis allied to mercury. It seems that the virus and the remedy have submitted to a combination so intimate, that it becomes almost impossible to break it. The farther I advance, the more am I struck by the greatness of the obstacle, and the more I hesitate to employ syphilisation after the use of mercurials.

The patients who are presented in the condition of antecedent hydrargyrisation, can, besides, be divided into four categories.

1st. Those who are attacked by affections of the skin and mucous membranes yet recent. Syphilisation succeeds here, almost as well as if there had been no mercurial medication; the quantity of mercury absorbed, appears to be of no importance. On the contrary, the inveterate forms, tuberculous, serpigenous and rupeacious syphilides yield less readily—either the new eruptions, more or less intense, more or less acute in their march, come in collision; or the existing eruptions are too stubborn. The inoculations give ulcers but little active: in this case, I administer iodine at the same time that I practice syphilisation, and, after under the influence of this substance, the inoculation assumes its legitimate activity. It seems that iodine enjoys the property of destroying the combination made between mercury and the syphilitic principle.

2d. Those who have suffered from affections of the bones, are not proper subjects for syphilisation, as the osseous alterations may or may not be the consequence of hydrargyric treatment.

3d. Those who are subject to nervous complaints, paralytic or hyperesthetic conditions, may experience the good effects of syphilisation. I have recounted elsewhere, a cure of syphilitic paralysis; when, on the contrary, the nervous troubles rest without their specific manifestations, the chancres are never good, the general state of health alone can be ameliorated.

Perhaps it will be asked, is it right, with such feeble chances, to have recourse to syphilisation? I believe that, if there is no other merit attached to it, it has that of destroying the dyscrasia, and preventing an extension of the evil the physician has been unable to remove. In these cases, it is necessary to lose no time in the administration of iodine. I am far from denying the utility of iodine, but I believe it exercises upon syphilis, an action really secondary. The numerous experiments I have instituted upon this subject, have convinced me that the principal virtue of iodine, here, is as an antimercurial. It is wrong to assert that mercury cures the first secondary accidents, and iodine those which follow latter: it should be said that iodine is indicated against the accidents which appear as consequences of mercurialisation.

4th. Finally, I arrange, in the last class, those who, appearing perfectly healthy themselves, have given birth to syphilitic children. The observations I have made, are neither complete nor sufficient.

The time demanded by syphilisation, upon individuals mercurialised, is exceedingly variable: as a general rule, they require a longer medication than others; say from 4 months to a year, with mean of from six to eight months, and yet, all fear of recurrence is not removed. Of 37 syphilised patients, who had, at first, been treated mercurially, 7 had a return with symptoms of medium intensity, that which proves at least, that the inoculation had not endowed the virus with new vigor.

The third proposition which I omitted in the beginning, is relative to the general improved health which the syphilised experience. When the usual symptoms of constitutional syphilis, such as fatigue, insomnolency, rheumatic-pains, exist, they disappear with syphilisation, and afterwards the patient even gains a certain "embonpoint." Probably, physicians who have never either practiced syphilisation themselves, or seen it practiced, will receive this assertion with doubt, but experience is all in its favor: at the end of three or four weeks of treatment, the patients affirm that they feel themselves disposed, and at the end of the treatment, they are in a state to undertake the most laborious occupations. It has become almost an invariable usage to oppose to syphilisation, as a decisive argument, the danger which it entails as a consequence. It is,

above all, upon the phagedenism of the first ulcers, that this is founded. It is thought reasonably enough, in appearance, that if one single chancre can produce such great disorders, a hundred inoculations ought to multiply, greatly, the peril. Facts have shown that phagedenism is a rare exception, and that artificial chancres do not provoke such accidents.

Until the present, the results I have given so briefly have been obtained from adults; and until the last months of the past year, I have only applied syphilisation to persons in the strength of age. Encouraged by the remarkable effects I witnessed, and disturbed by the too often sad consequences of the mercurial treatment, I yet hesitated to apply to infants the method of inoculation. Would infants be able to support the suppuration determined by artificial chancres? Would they not be deeply if not fatally affected? I can only say that I passed more than a year in these indecisions, but the comparative examination of treatments proposed and attempted upon infants, finished by triumphing over my scruples. It was at the end of the last year that I commenced a series of researches upon infants, undertaking these experiments with the same inquietude I experienced, when, for the first time I introduced a lancet charged with the virus, under the epidermis of an adult. The event has completely reassured me, the fears I had conceived relative to the suppuration, were vain; the artificial chancres were so small that it was with difficulty that one could borrow matter for successive inoculations.

I will content myself with resuming successively some few of the long observations I have gathered up to this date.

1st. Maren Olsdatter, 1½ years, entered the hospital 22d September, 1855. Ulcerated mucous tubercles around the arms and labia majora, redness of the throat with alteration. The infant nursed by its mother who was syphilitic and had been treated mercurially. The first manifestations date about a month back. Olsdatter has had, in all, fifty inoculations, of which twenty-six did not succeed, leaving a total of twenty-four chancres; all the ulcerations were small, and all healed two months after the commencement of syphilisation; at the end of four months the immunity was complete, consequently requiring the same time as in adults. The syphilitic phenomena disappeared gradually to the 27th day; the last

vestiges of the mucous tubercles were not effaced until the end of four months and a half. From the 9th to the 22d of February, it suffered from an attack of pneumonia, but the cure of the syphilis had taken place eighteen days before.

2d. Madeline Svendsatter, 6 months of age, entered the hospital 21st November, 1855. Mucous tubercles of different dimensions about the genital parts, one of them which is ulcerated has about the dimension of a franc piece. The infant is pale and nervous; some pustules on the head; nursed by a syphilitic woman; no indications upon the health of father or mother. This infant underwent, in all thirty-eight inoculations, of which were fifteen without result, or twenty-three artificial chancres having the same characters as in the preceding case. Six weeks after inoculation, the artificial ulcers took on a redoubled activity, at the same time that a papulous exanthema appeared. Immunity was acquired about the end of two months and twenty-two days, that is four months and a half after the commencement of syphilisation. All the symptoms had disappeared.

3d. Christensen, boy of seven weeks, entered 30th January, 1856. Observed upon the nates, internal surfaces of the thighs, the heels, and the hands, round brownish colored spots, which appear elevated above the skin, and of which the diameter is from one to two lines; many of these spots are squamous. No affection of the mucous membranes except a light coryza. The mother was treated seven years since, by the method of Dzondi, for a constitutional syphilis. Since then, she has had four children; the first, prematurely born, did not live; the second came at eight months; the third lived eleven days; the last has been submitted to 135 inoculations, of which 104 positive. The first gave ulcers from two to three lines in diameter, and sufficiently deep; later, they cause only small pustules, often hardly furnishing inoculable matter. Immunity existed at the end of four months in spite of the considerable number of inoculations. The syphilitic accidents commenced to diminish at the fourteenth day; they disappeared at the sixth week, when a new eruption of short duration supervened. The general health is well maintained. As seen by the preceding facts, inoculations have been practiced upon infants as upon adults. I have only inoculated fewer



chancres each time, and repeated the operation less frequently (four to five days of interval, sometimes beyond that time.) The development of the pustules seem slower in infants than in adults. It is not common for the pustule to become evident until the end of the second day. They attain rarely dimensions which surpass one or two lines in diameter; they are slightly characterised, softer, less neatly depressed in the centre; the redness of the areola is insignificant, often null. The consecutive alteration has the characters peculiar to syphilitic ulcers, but they are developed slowly, and tend to cover themselves with scabs under which they extend. The farther one advances with the syphilisation, the smaller and more superficial they become. The cure is not accomplished rapidly, and the matter secreted remains for a long time inoculable, (twenty-six days in the first patient.) Artificial chancres are hardly at all depressed, and but little colored by pigment.

The fears which I had conceived, were not then well grounded. The chancres, instead of being more extended, as I supposed they would be, were of small proportions. As to definitive effects, they have conformed to those given by observation on adults.

1st. There is an immunity from syphilitic virus in infants: the time is nearly the same for their cure, as for that of individuals more advanced in age, as well as that the inoculations were less numerous. The susceptibility to infection of the virus, varies according to individual disposition.

2d. The existing syphilitic phenomena disappeared. The infants were exempt from all mercurial treatment. But one important circumstance should be noticed: The two first were suffering from an acquired disease; the last from hereditary syphilis. It was to this fact, that the little patient owed the long time in which it was liable to contract the malady; it was to the mercurial treatment to which its mother had submitted, and of which it felt the effects. I have, actually, to treat two infants of six months, to whom hydrargyric preparations have been administered. The artificial ulcers on them, are more extended and more profound, but the other phenomena obey the common law.

3d. The general condition of the infants has not been altered, disadvantageously, by the inoculations; they are as fat and healthy as possible.

I do not believe that, in comparing the results with those given by young persons treated mercurially, there is room to hesitate. The whole world knows with what difficulty infants tolerate the use of mercury, and what sad influences it exercises upon their organism when it does not cause death. The element of *time*, at this age, is not to be taken into consideration. What imports, if the little patient is cured, that it bears for a few months, true little ulcerated pustules. As for the probability of recidives, the future only can teach that which it is permitted to hope ; but should recurrences supervene, is it not at least doubtful that they will be more grave, or as grave as those which a mercurial treatment is powerless to prevent ?

## SELECTIONS.

*On the Evil Effects of Marriages of Consanguinity.* A Paper read before the Louisville Medical Club, by S. M. BEMISS, M. D.

\* \* \* "They breed in-and-in, as might be known ;  
Marrying their cousins, nay, their aunts and nieces,  
Which always spoils the breed if it increases."

Some facts illustrating, in a remarkable degree, the evil results of marriages of consanguinity, fell under the observation of the writer several months ago, and determined him to collect others of a similar character, and endeavor to arrange them in such a form as to warrant some definite conclusions upon this important subject. The collection of original facts connected with these marriages is a matter of difficulty and delicacy, and oftentimes as disagreeable as it is difficult and delicate. We can seldom gain information in reference to their history and results from any source so exact and reliable as from the family itself; and such is frequently the secrecy observed by relatives in regard to these revelations, that we are unable to obtain statistics sufficiently minute to afford a basis for positive conclusions. Such statistical information as my paper contains, may, however, be relied upon as strictly correct; for I have at once rejected all presented to me in such a manner that I was not able, from my knowledge of the informant, to indorse as entirely to be relied upon. One other difficulty met with in a comprehensive presentation of this subject, is the poverty of its literature; for, though long and able treatises have been written upon the best methods of preventing or arresting deterioration of domestic animals, by the introduction, from time to time, of new crosses into their respective breeds, yet the question of degradation of numerous families of the human species, by neglect of similar counteracting influences, has rarely been a subject of literary or medical discussion. Nevertheless, the opinion is strictly tenable, however humiliating it may be to our pride, that the rules which govern the procreation of species are not essentially different in man and domestic animals. This want of medical research upon the subject in question, does not proceed from the novelty or recent origin of the truth just stated, for Killiet has well observed, "No one can claim priority of the idea, when its antiquity is such that we cannot trace it to its source."

In primitive ages, marriages between near blood relations were occasionally necessary to the perpetuation of the race; but it is very probable that their abuse led to the early enactment of laws to establish the degrees of consanguinity, beyond which marriages might be consummated without fear of perverted sanitary condition in the progeny. It is by no means an ascertained fact of history, that these early laws of incest owed their origin to physiological observations; but it seems to me entirely reasonable to infer that, witnessing the pernicious effects of such unions upon offspring, first suggested the establishment of laws to prevent the

continued repetition of the evil. Those were ages in which physical force had not been superseded by the inventions and mechanical appliances of the present day; and the power of a community was measured by the amount of muscle under its control. Legislators, who contended that "walls of men were better than walls of stone," would certainly exercise the most sedulous care to maintain, so far as practicable, the physical integrity of their people. In further proof of this inference, Socrates, when inveighing against the incestuous marriages that were sometimes practised at Sparta and Athens, says, he regards them as "prejudicial to the healthy propagation of the species."—(Rilliet.)

The laws of Moses interdicted marriages within the third degree of relationship. The Roman laws were more strict in this respect in former than in later times. Plutarch says, "In ancient times the Romans abstained from marrying their kinswomen in any degree of blood; as they at present forbear their aunts and sisters. It was late before the marriage of cousins-german was dispensed with."—(Janeway.) The Catholic Church, at an early period, opposed itself to blood alliances. Pope Gregory, the Great, in proscribing such marriages, gives, like Socrates, a physiological reason: "*Experimento didicimus ex tali conjugio sobolem saccerenere non posse.*"—(Rilliet.)

References may be found to the unfortunate influences of marriages of consanguinity upon offspring, in various medical works of the previous and present century,\* but no facts are adduced to support the conclusions of the authors; nor have any statistics, illustrating these effects, been presented to the profession, so far as I am aware, except some facts in Dr. Howe's valuable reports on idiocy.

By much labor, I have obtained statistical accounts of thirty-four marriages of consanguinity. Of this number, twenty-eight were of the third degree of the civil law, or between first cousins. Of the total number of marriages, twenty-seven were fruitful and seven sterile. The twenty-seven fruitful unions, produced one hundred and ninety-one children. In only thirteen of these marriages, was the sex of the offspring reported, giving forty-nine males to forty-two females. Of the twenty-eight marriages of the third degree of relationship, twenty-three were fruitful and five sterile. Of the six marriages in the fourth degree, four were fruitful and two sterile. Of the six of these latter instances of sterility, the female was the product of a marriage of consanguinity. The relative proportion of children to the total number of marriages was as 1 to 5.6. The average fecundity to each fruitful union was seven and a slight excess. The average fecundity to each fruitful union was seven and a slight excess. The average births to each fecund marriage in the third degree of kinship was 6.87, nearly. The average number of births in the fruitful unions of the fourth degree, was 8½.

Of the 102 children resulting from these marriages, 58 perished in early life. In 24 of the 58 deaths, the causes are stated as follows: of consumption, 15; of spasmodic affections, 8; of hydrocephalus, 1. Of the 134 who arrived at maturity, 46 are reported as healthy; 32 are set down as deteriorated, but without absolute indications of disease; and 9 are returned without any statement as to health or condition. The remaining 57 all possess such abnormalities as to render them the subjects of

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\* Mason Good, Combe, Barlow, &c.

particular observation. These are classed as follows: 23 are scrofulous; 4 are epileptics; 2 are insane; 2 are mutes; 4 are idiots; 2 are blind; 2 are deformed; 5 are albinos; 6 have defective vision; and 1 has chorea.

In point of fecundity, these marriages probably present results not differing materially from the average fertility of marriages in the rural districts of the West. I do not know of any rules by which to determine the average number of births to a marriage among our country population, but I do not doubt they will equal in fruitfulness the most prolific portions of Europe. In some villages of Scotland, the proportion of births to a marriage is stated to be seven. (Cy. Pract. Med.) The parties to the above intermarriages were, with one or two exceptions, of rural habitation; were, in many instances, remarkable for mental and physical development; and were all surrounded, in a large majority of cases, by circumstances of living calculated to insure the utmost degree of fruitfulness and prolonged life.

These statistics, then, I am satisfied, exhibit results on this account more than usually favorable to the offspring. In support of this opinion, we may contrast this report with Dr. Howe's observation of 17 marriages of blood relations, in his report on idiocy. These 17 marriages gave "birth to 95 children, of whom 44 were idiots, 12 scrofulous and puny, 1 deaf, 1 dwarf, 58 in all, of low health or imperfect, and only 37 of even tolerable health." An unusually large number, over one-fifth, of the marriages in my report, were sterile; and I am not aware that this can, in any instance, be imputed to other causes than the influence of consanguinity. Some of the parties to these sterile unions have had excellent corporeal and mental endowments, and have arrived at unusual longevity. In four instances reported to me, females descended from these intermarriages have proved barren without exhibition of constitutional defect. In two of these instances, they had married relatives; in the other two, they married without the circle of family affinity.

I shall not attempt to offer any hypothesis as to the active cause of sterility in these cases. It is a subject in reference to which physiological reasoning has, up to the present time, furnished no satisfactory results. We cannot force our researches into the hidden penetralia of nature, and there discover how her processes of reproduction are so interfered with, as to render these intermarriages disastrous to their issue; nor by what means she avoids these unfortunate results, by rendering many such unions fruitless. We must leave the development of this subject to the future physiologist: if, indeed, the sea of human knowledge shall ever extend its limits in this direction.

I come now to speak of the defects of the offspring, in the cases alluded to. I have no doubt that the number of cases of scrofula is larger than the same number of descendants of marriages of consanguinity would ordinarily exhibit. This predominance of scrofula probably results from the fact that, in three of the families, there is reason to suspect the previous existence of strumous taint. These families alone yield sixteen cases of scrofula. This fact, and the large proportion of the deaths ascribed to phthisis, demonstrate the truth of Dr. Barlow's observation, that the tuberculous diathesis "shows itself, in the greatest intensity, in the offspring of marriage between relations, in whose family the taint has already existed."

I have not obtained sufficient information to enable me to describe the particular manifestations of scrofulous diathesis in each individual case; some of them are, however, represented as scrofulous ophthalmia.

Riliet places epilepsy first in order of frequency, of the diseases of the nervous system, to which the products of family intermarriage are most liable. My report comprises four epileptics; the father of one of whom was likewise the result of a marriage of cousins. Eight of the deaths are ascribed to spasmodic affections, and four of this number are specified as epilepsy.

I have no information in regard to the degree or character of mental aberration of the two insane subjects, contained in the enumeration. The two cases of mutism were congenital, and will be again referred to, as will also the four cases of idiocy.

I am not informed whether the two cases of blindness were congenital, or produced causes occurring after birth; they, however, both occurred in the same family, and were, in all probability, congenital.

The cases of deformity were, in one instance, curvature of the spine; in the other, malformation of an arm. The six cases of defective vision, were myopia, and the results of scrofulous ophthalmia.

It now remains to notice the most remarkable of all the abnormalities of offspring my report presents. I refer to albinism. Absence of the pigmentary cells of the integument and coats of the eye, is, undoubtedly, like most other deviations from the normal type of reproduction, a mark of deterioration. But albinism sometimes occurs where there is no cause or condition, apart from its own manifestation, to lead us to infer degradation; and, having once occurred in a family, the influence of maternal emotion might have much to do with its repetition. It may exist in connection with a moderate state of corporeal health, and a striking development of intellectual sprightliness, as in some of the subjects of my report. In domestic animals, it is so well understood to indicate impaired value, that connoisseurs in horseflesh reject such animals as have absence of coloring pigment in the hair and tegumentary tissues. M. Siéle's\* observations upon albino cats led him to conclude that it was, in this animal, uniformly attended by absence of the auditory sense. No defect of hearing has accompanied its presence in the subjects of my report. Almost all the albinos here included are nearsighted. Esquirol also mentions an albino who was certainly myopic, and another whom he supposed to be. I am not aware that any author has spoken of this condition as the result of in-and-in marrying; but Esquirol states, that wherever we meet with albinos, there we also find the goitrous and idiotic; and these latter are known to be common products of marriages between kindred. From Dr. Howe's investigations on this subject, it is safe to infer that idiocy is oftener the result of this cause, than was heretofore suspected. In Dr. Howe's report, seventeen out of three hundred and fifty-nine idiots, were found to be products of marriages of consanguinity. If the same ratio held good throughout this country, there would have been, in 1850, seven hundred and forty-seven idiots in the United States, the offspring of parents connected by blood-ties.

Congenital deafness is another impairment common to the products of marriages of this character. M. Meniese, physician to the Imperial In-

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\* London Medical Times, vol. 18, p. 128.

stitute for the Deaf and Dumb, at Paris, considers this infirmity, when congenital, more often referable to this cause than any other. My inquiries have not, thus far, led me to a similar conclusion; but its great frequency among the offspring of such marriages, cannot be doubted. A writer in the *National Intelligencer*, some years ago, stated, that "a great proportion of the inmates of the asylums for the deaf and dumb, the blind and idiotic, are found to be the product of the intermarriages of cousins." Then, if we add to the 747 idiots, the mute, epileptic, blind, and insane products of these marriages, computing the number at the very lowest probable figure, and sum together the whole, we shall have, resulting from the physiological error in the United States, not less than *two thousand* victims, whose conditions are, for the most part, irremediable; besides a greater number suffering from other impairments of constitution entailed upon them by the same cause. Truly,

"Democritus did well to laugh of old:  
Good cause he had, but now much more;  
This life of ours is more ridiculous  
Than that of his, or long before."

I am aware that many circumstances may produce defective issue besides the influence of consanguinity, such as the habits of the parents, and their particular condition at the period of approach. Maternal emotion or constitutional derangement during pregnancy, may also frequently determine the character of the offspring. But these accidental influences are not more likely to prevail in marriages of consanguinity, than in those of a different character; while the number of departures from a healthy standard, in the issue of these marriages, is incomparably greater than in those where no such connection exists.

To prove still more certainly that these various impairments of offspring are due to the influence of too frequent admixture of the same blood, we have only to associate the cases in my report in the various degrees of relationship, and observe if the proportion of accidents to the offspring is increased with the degree of relationship. To arrive at this point, I shall divide the productive marriages in my report into three classes: those of the fourth degree, or between second cousins; those of the third degree, or between first cousins; and those nearer than the third degree, as between double cousins, or between cousins, themselves the descendants of cousins. The table will stand thus:

| Degree.          | No. of Marriages. | No. of Children. | Died. | Diseased. | Deteriorated. | Healthy. | Unknown. |
|------------------|-------------------|------------------|-------|-----------|---------------|----------|----------|
| 4th degree,..... | 4                 | 34               | 8     | 6         | 10            | 10       |          |
| 3d degree,.....  | 19                | 130              | 37    | 31        | 17            | 36       | 9        |
| 3½ degree,.....  | 4                 | 27               | 13    | 5         | 6             | 3        |          |

It will at once be seen, that the percentage of calamitous results to the progeny is largely increased as the relationship becomes closer. I have also accounts of two marriages in the second degree, or between uncles and neices, but they have not been consummated sufficiently long to determine their results.

I now propose to notice briefly the circumstances calculated to modify the effects of marriages of consanguinity, either in lessening or aggravating their evil results. That these marriages are sometimes practiced without apparent ill consequences to the offspring, is obvious to all whose attention is drawn to the observation of these points. Under what circumstances, then, may they be expected to be followed by healthy offspring? Is it when, as Mercatus has advised those entering upon matrimony, the parties are of opposite temperaments? I incline to the opinion that this, with some other circumstances to be mentioned, has great influence in determining the results. Baillon has remarked, that "parents transmit to their children disease as well as wealth, but the former much more certainly than the latter." (Stillé's Pathology.) This remark is probably equally true with regard to points of temperament and types of physiological idiosyncrasy as to predisposition to disease may often consist in a hyper-manifestation of certain constitutional peculiarities. Nature seems to have designed that the conditions and tendencies of human organisms should be kept very nearly in a state of equilibrium. This equipoise, necessary to the healthy condition of man, upon whatever inexplicable cause it may depend, may be readily disarranged by giving undue predominance to any particular constitutional phase. The slightest deviations from a normal mean would constitute individual or family peculiarities; while more marked perversions become morbid manifestations, and infirmity results. As in the moral man none are exempt from the taint of sin, so in the physical man each individual of our race has his obliquity towards disease,—generally, perhaps uniformly, towards some particular disease. It is then reasonable to expect that when two individuals marry, who possess the same morbid proclivity, their offspring will present that identical divergence, but in a much more marked degree. Thus, undoubtedly, have originated many family peculiarities, perverted tastes, and morbid diatheses. The circle of individuals thus constituted sometimes includes large communities, as is observed in reference to the disease denominated *Plica Polonica*, which attacks the Polish and spares the Russian peasant living under external circumstances equally liable to produce the malady. (Pritchard.) There is no better mode of maintaining this happy mean of temperament than by admixture of types of constitution possessing no family identity. We may possibly and justly, think with Benton, that "it hath been ordered by God's especial providence, that in all ages there should be (as usually there is,) once in 600 years, a transmigration of nations, to amend and purify their blood, as we alter seed upon our land; and that there should be, as it were, an inundation of those northern Goths and Vandals, which overran, as a deluge, most parts of Europe, to alter, for our good, our complexions, which were much defaced with hereditary infirmities, which, by our lust and intemperance, we had contracted."

History presents some instances altogether antagonistic to the doctrine of degradation from this cause. Especially does Sacred Writ offer some cases, of such remarkable emphasis, that it would be extremely difficult to explain the non-sequence of deterioration of offspring, if the rule by which our contemporaries are measured were equally applicable to them. Abraham, Isaac, and Jacob, all married wives connected to them by blood-ties, and yet they were the chosen progenitors of a privileged and highly gifted people, and nothing pertaining to their history suggests the



idea of immediate degeneration of progeny. A very learned divine has explained to me this seeming contravention of a natural law, by the supposition that, as the Jews were a people chosen for an especial purpose, they existed under abnormal conditions, and all influences ordinarily ensuring to their prejudice were providentially countervailed. This presumption is certainly plausible; and as we see the same people protected in future trials by miraculous interposition, the argument may be entertained without violence to reason. But without presupposing the exercise of supernatural influences, the apparent inoperativeness of this law of degradation by in-and-in marrying, in the above instances, as well as in those of Adam's sons and daughters, may be explained by the incomparably superior endowments of these primeval denizens of our globe. Those were days in which man dwelt as it were in the presence of his Creator; "when," as Schlégel observes, "God familiarly taught man the rudiments of speech, as a parent teaches a child." If those ancient patriarchs were found worthy of these high honors, and if they could ordinarily attain to a longevity many times beyond that to which our most perfect organizations can now arrive, how immeasurably superior to ourselves must we suppose them to have been in vigor and excellence of constitution. They were thus enabled to propagate the race by alliance with their own blood, with no such baneful results as similar causes now call forth. But it is not necessary to believe that such unions were even then exempt from pernicious effects, but in their perfect condition of corporeal organism, and freedom from predispositions to disease, the deterioration of race resulting from this cause was probably exhibited in the lowering of the vital powers and simple abbreviation of life, rather than in demonstrations of the diseases of the present day. We still see these very same circumstances of constitution and condition counteracting, to a limited extent, the evil tendency of this cause. In the early settlement of the West, the inhabitants were, for security, gathered into communities of greater or less magnitude, separated from each other and from the older States by miles of dangerous wilderness. It was natural that each community should be composed, in a great degree, of blood relations, since, in forming companies for migration, the several branches of one family would often. When in their new homes, a scarcity of marriageable material would often render unions between relations expedient, and afterwards, these covenants, arising at first from necessity, became a habit, often convenient in some respects, since it preserved estates within the family circle. But these pioneers were a hardy, robust people, living much in the open air, and undergoing vigorous exercise; having for their aliment wild game and the fresh products of a genial soil, and not addicted to any habits calculated to impair the integrity of their well-endowed constitutions. We would naturally expect conditions of life so favorable to the sound development of the bodily organism to overrule all counteracting influences, and it might prove almost the exception, when marriages of consanguinity gave origin to defective issue. Not so, however, among the valleys of the Alps, where from the barriers formed by impassable mountains, the same seclusion of communities and frequency of family alliances are found to exist. There, with impure air, bad diet, and constitutions infected for generations with hereditary taints, it proves an exception when a healthy child is born from parents

of the same blood. There we find goitre, cretinism, scrofula, albinism, and mutism in their most aggravated forms.\*

In this country, the Jews, whose religion forbids them to marry except with their own race, are often driven, from the scarcity of marriageable subjects in their communities, to form alliances with their own kindred, and a physician of distinction informs me that they are peculiarly liable to strumous taints and congenital defects. In this connection it may also be of interest to mention Bayard Taylor's observation, that the Jews of America are far inferior in personal appearance to the Jews of Palestine. These same social conditions and connubial exigencies exist also among the free colored inhabitants of the Northern States, and may account for the increased ratio of deaf and dumb, blind and insane, found in this population. (Comp. U. S. Census, 1850, p. 77.)

Wherever in-and-in marriages are practised under circumstances of life calculated to annul their tendency to deprave the offspring, we see a prominence given to certain points of physiognomy, which constitute striking marks of resemblance, not only evinced in families, but sometimes found to pervade a numerous nation. Thus Hippocrates states that the Scythians all resembled each other, although they were different in appearance from all other people. The Jewish face has, under favorable circumstances, retained its characteristics from the earliest ages to the present day.

History will, I think, sustain the opinion that the most vigorous people have sprung from the ingrafting of nations differing in constitution and temperament from each other. I believe, with an observing writer, that the extraordinary activity and energy of the American people are due to the composite nature of their blood. This rule, however, seems subject to some qualification; for there certainly exist strong reasons to believe that matrimonial alliances between the greatest possible contrasts to be found on our globe, the negro and Caucasian races, for instance, are not favorable to the most vigorous propagation of species. I do not look upon mulattoes as hybrids, but think they exhibit less of vigor and vital force than are found in crosses where there is less contrast. Mr. Alexander, perhaps one of the most experienced cattle-breeders of the world, has observed that the cross between the finest and coarsest breed of cattle is far inferior to that between the best blood and a medium between that and the worst.

The prevention of the serious evils I have under consideration, which of course consists in the prevention of in-and-in marriages, is a point which I do not think is to be attained by enactments of civil laws bearing upon the subject. It would prove equally difficult to convince either legislators or communities that there could be a necessity for going beyond the requirements of the Levitical law. It is, however, the duty of physicians to labor unremittingly in the collection of facts pertaining to this subject, and to submit them to the public. A reasoning man will refrain from a connubial association likely to inflict irreparable

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\* It may be proper to remark, in this connection, that there is within a few miles of this city, a child, the issue of cousins, whose cranial bones have undergone the rachitic softening so frequently observed among the cretins and idiots of the Alps.

injury upon his offspring, after he has learned that such is the fact; and church governments will forbid their clergy to celebrate nuptials which they find tend to the abasement of the species and the subversion of God's beneficence to mankind. As previously stated, the Catholic Church has already discouraged union in any near degree of blood affinity. We have no means of ascertaining, by reference to masses of population in diminishing the congenital occurrence of such defective offspring as my report presents. It has been attempted in Europe, as Rilliet mentions, with results favorable to Catholic populations. Quetelet's computation of the ratio of deaf and dumb to the whole population is precisely the same in both England and Italy. M. Meniese states that at this day every trace of this interdiction of the Church has disappeared: "Pendant une longue suite de siècles, le mariage fut absolument interdit à tous les individus parents à un degré quelconque, l'Eglise se réservant le droit d'enfreindre la règle posée par elle même dans les rare circonstances dont elle voulait apprécier la valeur, mais ces rigueurs de la discipline furent sujette, comme tout d'autres choses, à un relâchement déplorable, et aujourd'hui toute trace de ces interdictions a disparu."

The facts offered in my paper are much too meagre to afford a basis for positive conclusions, but I think it is a step in the right direction, and will at least serve as a guide for other inquiries on this subject. I have, in the last few days, learned, with much pleasure, that Dr. John Bartlett, of Keokuk, Iowa, is now collecting facts for the publication of an essay on this subject. We may congratulate the profession that such an earnest and indefatigable lover of science has taken the subject in hand. The attention of the public press is somewhat, but not sufficiently, awakened to the importance of this subject. The Ohio Legislature, much to the credit of her physicians and law-givers, passed, at their last session, a law requiring the assessors, throughout the State, to collect the facts connected with marriages of consanguinity and certain defects of offspring, and report them. These statistics will furnish a sufficient amount of testimony to establish, beyond cavil, the character and degree of influence these marriages exert upon offspring, and the profession will await with much anxiety, the publication of this most important addition to our vital statistics.\*

For reasons too apparent to be indicated, I am compelled to forego the satisfaction of an individual expression of thanks to many friends, both in and out of the profession, for assistance they have kindly rendered me in the collection of facts upon this subject.

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\* The following is a copy of the Act referred to:

**An Act to ascertain the Number and other Facts respecting Deaf and Dumb, Blind, Insane, and Idiotic Persons, in the State of Ohio.**

**SECTION 1.** Be it enacted by the General Assembly of the State of Ohio, That the Assessors in the several townships of each County of the State, while performing their duties, shall ascertain and enter upon a schedule prepared for the purpose, the name, in full, of each deaf and dumb, blind, insane, and idiotic person in the township, together with the age, sex, color, occupation, and place of birth of said persons, and whether educated or not; also, the names, in full, of the parents of said deaf and dumb, blind, insane, and idiotic persons, their place of birth, occupation, number of children, number of deaf and dumb children, and what affinity of blood, if any, existed between the parents previous to marriage; and that said papers be returned, in due form, to the Auditor of the proper County, at the time of returning the assessment of property, and by the said Auditor to the Secretary of State, on or before the first day of July, 1856. The Auditor of State shall furnish to the several County Auditors the necessary blanks or schedules to carry out the provisions of this Act.—*North American Md. & Churg. Review.*

*Biographical Sketch of* SAMUEL HENRY DICKSON, M. D., LL.D., Professor of the Theory and Practice of Medicine in the Medical College of the State of South Carolina. By THE EDITOR OF THE CHARLESTON MEDICAL JOURNAL & REVIEW.

The subject of this Sketch was born in September, 1798. His early education was obtained in his native city, Charleston, South Carolina. He went to Yale College at the age of 13, and joined the Sophomore Class, graduating in 1814 under the Presidency of Dr. Dwight. Returning home, he commenced at once the study of Medicine in the office of Dr. Philip Gendron Prioleau; in 1817 he began to practice during the prevalence of Yellow Fever: in the two succeeding winters he attended, in the University of Pennsylvania, the Lectures of Wistar, Physick, Dorsey, Chapman, and others; and received in 1819 the diploma of M. D. He entered at once into business, assisting Dr. Charles H. Glover through the pestilential summer in the Marine and Yellow Fever Hospitals; and has continued ever since to be as fully employed in the profession as he has desired.

Ambitious of distinction and usefulness, he projected, with Drs. Ramsay and Frost, the establishment of a Medical College, and, while laboring to carry the enterprise into effect, gave lectures gratuitously on Physiology, as Dr. Ramsay did on Surgery. The College went into operation in 1824, Dr. D. being elected without opposition to the Chair of Institutes and Practice. Dissentions occurring with the Medical Society of South Carolina—the nominal Trustees of the School—he resigned his seat in 1832, but resumed it the next year under a new charter obtained by his colleagues from the Legislature.

In 1847 he accepted the unanimous invitation of the Trustees and Faculty of the New York University to fill the Chair of Practice in that Institution, made vacant by the death of Professor Revere. He lectured three winters in the city of New York with approbation and success; but in 1850 he was induced to return to the South, by the earnest wish of his friends and associates there. The resignation of the Chair of Surgery by Professor Bellinger, and the resumption of its duties by Professor Geddings, who had meanwhile filled that of Practice, left the latter open for its former occupant, who had so long held and still occupies it. The whole arrangement presents a rare, if not unparalleled instance of generous self-sacrifice.

On his arrival in Charleston, Dr. Dickson was greeted with the most cordial welcome; and he was honored by his professional friends and others with a public dinner, at which the most complimentary testimonials of esteem and regard were tendered him, which were gratefully acknowledged and reciprocated. In 1851 he presided at a similar entertainment given to the distinguished Marshall Hall by the physicians of Charleston. In that year he received from the New York University the honorary degree of LL.D., a compliment peculiarly agreeable to him, as betokening a kind remembrance of his former relations with that Institution; and a mark of distinction worthily conferred, because of his high erudition and the eminent position which he occupies in the Republic of Letters.

Devoted to his Profession, Dr. Dickson has kept up with the scientific progress of his day; he reads very much, and cultivates literature assidu-

ously, his style being pure Anglo-Saxon. Nothing in the domain of human intelligence escapes his vigilant eye; the amount of matter thus ingested being thoroughly digested and subjected to his prodigious powers of analysis. He has written extensively for the Journals and Reviews on every variety of topics. A small volume of his verses—printed but not published—was favorably noticed some years since in the *Southern Literary Messenger*; and is referred to in *Duykinck's Cyclopaedia*. At various times and places he has delivered speeches, lectures, and addresses upon almost every subject of human interest—religious, political, social, educational, and miscellaneous. Among these we may mention the Oration before the Phi Beta Kappa Society of Yale College at the Commencement of 1842, when the Hon. J. C. Calhoun failed, from ill-health, to pronounce the Oration before the Alumni; the Annual Address to the Georgia Historical Society in 1845, at Savannah; an Address to the Agricultural Society of Greenville, So. Ca., in 1847; and the Centennial Oration before the Grand Lodge of Ancient Free Masons of So. Ca., in 1854.

To him belongs the credit of having made the first *Temperance* Address ever uttered South of Mason and Dixon's line, taking then the position he has ever held, denouncing the habitual use of *distilled* liquors as beverages, while he approves of, and favors the employment of the various products of mere fermentation. Hence he warmly advocates and takes pleasure in the success of all efforts to grow the grape in our country, and to manufacture its genial juice into wines of every character and quality.

He is the author of a large number of monographs, dispersed through the American Medical Journals; of two volumes entitled "Outlines of Lectures upon the Theory and Practice of Medicine;" of "Essays on Life, Death, Pain, Intellection, and Hygiene;" and of "Elements of Pathology and Practice." The last mentioned work, although intended by the Author chiefly as a Text Book for his classes, yet contains material from which even the mature practitioner may derive instruction. In the first part of the work—that, namely, which treats of general Pathology—the subjects of Irritation, Congestion, and Inflammation—their differences and their relations—have received the most complete as well as the most lucid exposition, of which, in our opinion, they are susceptible; and the essay on the "Types in Fever" is a model of research, analysis, and philosophical deduction.

In his private office, he has taken charge of, and educated a great number of attached pupils—about 70.

He claims to have been among the first to introduce or accept the modified humoral Pathology of the present day; among the first to abandon the ultra heroic treatment of fevers in vogue at the time of his entrance into the profession; among the first to admit and yield to the force of the evidence adduced in modern times and still accumulating in proof of the communicability and contagiousness of our Western pestilence, Yellow Fever; among the first in this country to extend the employment of stimulants and anodynes in febrile diseases.

His earlier lectures were written out fully and with great care; for the last ten or twelve years, however, they are entirely oral; he enters the lecture room without the smallest note or memorandum, and with wonderful mental arrangement, pronounces extemporaneously his discourses,

which are characterised by great perspicuity, fluency, and command of language.

In the practical part of the profession he is distinguished by rapid mental action, quickness and brilliancy of perception; taking in, as it were, at a glance, all the features of the case, and arriving promptly at a conclusion.

By reason of his profound knowledge of general Pathology, he rarely errs in diagnosis; and we hesitate not to state—the statement being founded upon a long course of attentive observation, in which there has been abundant opportunity for verification or falsification—that in the matter of *prognosis* he approaches very near to infallibility. Nor is his knowledge in these respects limited to the practice of *Medicine* (the branch which he professes); for although he has always eschewed Surgery, yet he is occasionally consulted in obscure cases by his brethren who practice it on an extensive scale, and his views not only receive due consideration, but are frequently adopted and acted upon.

In medical and other polemics, he wields a Damascus blade of the keenest edge; and wo unto him who comes under its stroke! Master of the principles of logic, he seizes the weak point in his opponent's argument, and exposes its sophistry; and possesses rare ingenuity in extricating himself from a false position, should he be so placed, and eluding his adversary's grasp.

In his occasional efforts at public speaking he has acquired enviable distinction, not only by the graces of his oratory, but also by the cogency, force, and point of his remarks, and by the beauty and chasteness of the language in which they are rendered.

No one can know Dr. Dickson without being convinced that not only has Nature been lavish in her gifts to him, but that they have been industriously and successfully cultivated. Conspicuously does he bear the stamp of excellence; he would have excelled in the Forum as he has in the apparently humbler, but nobler sphere which he has chosen for his action.

He has of late shrunk from the burden and fatigue of general practice, and has confined himself to consultations with his professional brethren, in which he takes great interest. He has never enjoyed good health. His constitution, originally feeble, has been undermined by the severe and incessant study to which he has been devoted; his youth was constantly threatened with Phthisis, the hereditary disposition to which was shown by occasional hæmoptysis and habitual cough; and his advancing age has been embittered by the severest pangs of renal disease, and some obscure form of agonizing visceral neuralgia.

In closing this hasty sketch, we will only remark that Dr. Dickson's social life is characterised by the exercise of a colloquial power so remarkable as to throw a charm over all who are subjected to its influence; and to render him a conspicuous and attractive member of every circle in which he mingles.

## EDITORIAL AND MISCELLANEOUS.

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Editorial Correspondence.

PARIS, Nov. 15, 1856.

*Dear Doctor*—The School of Medicine was officially opened to-day. The exercises, or, perhaps I should rather say, the official robing of the Faculty, and, numerous *agregés*, was very imposing.

The form differed but little from that usually observed upon such occasions in America. The introductory was delivered by M. Natális Guillot; and, from the subject of the address, was received with considerable favor, it being an Eulogy upon the Character and Attainments of M. Requin, who died in 1854, and whose Chair he now fills.

From a recent decree of the Faculty, many were disappointed in obtaining admittance to the hall. It appears, that two years ago, during the introductory address, there was such a disturbance by the students, as to prevent the possibility of its delivery; since which time, to obtain admittance to the introductory exercises, it is necessary to present a card from the Secretary, or a note of invitation from the Dean, with the bearer's name. Learning the above regulation at an early hour, this morning, I was fortunate enough to obtain a note of invitation, from M. Dubois, Dean of the Faculty.

It was said yesterday and this morning, that M. Guillot would likely be disturbed during his introductory, which, however, from the subject of the address, or other considerations, did not occur; not that he is personally unpopular, but, that the manner in which he received his appointment to the Faculty, renders his position unpopular. Heretofore when a Chair became vacant, the applicants, and there were usually quite a number, were submitted to the most rigid test of qualification, and the one thought best qualified by the committee appointed to conduct the *concour*, received the position. At present the *concours* for members of the Faculty, have been suppressed—the Emperor reserving the right to fill the vacan-

cies. M. Guillot received his appointment from the Emperor.

The Latin Quater, in which is located the public Institutions, both Law and Medical, has, for the past few days, presented rather a lively appearance. The students are returning in numbers, from their homes in the provinces, or other points, where they have spent their vacations; their gay re-unions, lively songs, &c., &c., has, as above suggested, changed to some extent, the aspect of this monotonous Quater.

The various Clinical Professors, for the past ten days, have been gradually assuming their respective duties; and after to-day, all will commence their regular course of instruction. So, you see, that the winter course is, at last, regularly underway. Not that the two months' vacation has been lost to those, who were disposed to work, as the same materials have existed; the hospitals, all the time open, and under the control of young talented physicians and surgeons, who are constantly laboring for character and position.

The city of Paris for the past month, has been remarkably healthy. With the exception of an epidemic of Puerperal Fever, at the Maternite and a few lying in beds at Hôtel Dieu, there has not been the least tendency to an epidemic of any kind, in several months. As an evidence of the healthy condition of the city, it is only necessary to say, that at La Charété, more than once, within the past few weeks, three and four days have passed, without a death—something rare in a hospital of five or six hundred beds.

The epidemic of puerperal fever above alluded to, was of a very malignant character; its ravages being so great that the Maternite was closed. It was in the lying-in ward of M. Trouseau, at Hôtel Dieu, which was afterwards closed, that I saw this fatal disease. Almost every case proved fatal in from two to four days; it is true, that some who complained of more or less pain, and had slight fever, recovered; but all who had well marked symptoms of puerperal intoxication, if you will allow the expression, died. The post-mortem examinations revealed quite a variety of lesions, all, however, traceable to one general source. In quite the majority of cases, inflammation of the uterus and peritoneum was well marked; but in a number of cases, not sufficiently extensive to account for the symptoms and death of the patient—having the appearance of



being rather an extension than the original seat of the inflammation. Abscesses in the various tissues, frequently in the joints, and readily detected before death, were not unfrequent; dependent, without doubt, upon a purulent intoxication, as pus was found in the veins of the uterus.

The plan pursued by M. Trousseau, whether objectional or not, will likely be objected to by those who regard every case of puerperal fever, as a symptomatic fever, dependent upon an acute inflammation of the uterus or peritoneum, and, for the arrest of which, active antiphlogistic remedies must be brought to bear. Small doses of calomel, frequently repeated; tonics, such as quinine, &c.; frictions frequently repeated over the abdomen, with opium and belladonna, followed by poultices, constituted in a number of cases, the treatment. To a question asked, if he ever bled in such cases, he remarked, that he never did—that the patient would then have to recover from the loss of blood as well as the disease.

On the 10th inst., I visited the wards of M. Becquerel, at La Pitié. Since the death of that great and good man, M. Valleix, M. Becquerel may be considered as one of the most practical, as well as one of the most popular lecturers upon internal pathology, in Paris. I found his wards crowded, and amphitheatre crowded, with medical students, the latter to such an extent, that many were disappointed in obtaining seats. His lecture, which was the first of the present course, was introductory to a series of lectures upon *the diseases of the uterus*. The field laid out was sufficiently extensive—embracing all the lesions of this important organ. The obscurity of some of the diseases of the uterus; the diversity of opinions in regard to the treatment of others better understood, as well as the extreme frequency of such affections, renders this a very important course—one that I should take great pleasure in following, were it possible. I am happy, however, to be able to announce, that I have made an arrangement with Dr. Wm. Hart of New Orleans, to report the entire course of lectures, for the Atlanta Medical & Surgical Journal. Dr. Hart has been in Paris near five years, and from his intimate knowledge of the French language, as well as the science of medicine, will be able to give a thorough exposition of the views of M. Becquerel. I look upon the above arrangement as quite

an addition to our Journal for 1857. The reports will commence with the April or May number.

In passing through the wards of M. Piorry, a few days ago, I was attracted by a slight operation which was being performed, the result of which illustrates, in a very striking manner, the danger of opening, by incision, abscesses of the liver—a danger not generally well understood by young practitioners; and, by quite a number more experienced, if understood, not regarded. The case in point, was an abscess of the liver; the precise character of which, from the rather obscure history, could not be determined. It was to render more complete the diagnosis, that the operation was performed, which consisted in a simple puncture of the abscess with a small exploring trocar. After the discharge of a small quantity of thick, healthy pus, the result evidently of an inflammation of the organ, the canula was withdrawn. In a few hours the patient was attacked with violent peritonitis, of which, he died in two or three days. The principle that I here wish to impress, was discussed before the operation, but it was imagined, that the puncture made in the walls of the abscess proper, by the small trocar, would not be sufficiently large for the escape of pus, the result, however, proved that a sufficient quantity escaped to set up an inflammation, which, proved fatal in a very short time.

I know physicians who pretend to science, and in a general way are successful practioners, who never, for a moment, stop to determine whether there be adhesions between the peritoneum covering the walls of the abdomen, and that covering the liver, but alike in all cases where there is a prominence and fluctuation, make full use of the bistoury. In all cases, if there be much distension, the incision is followed by a free flow of pus, which satisfies both physician and patient for the time, but if there be no adhesions, as soon as the abscess is to a certain extent emptied, the parallelism between the opening in the walls of the abcess and that in the walls of the abdomen is lost, and the remainder of its contents is discharged into the peritoneal cavity. The result, under such circumstances, is sufficiently well illustrated in the above case. It is always best, if it is desirable to reach the collection, to do so by a slower but safer process—by means of caustics, thus insuring adhesions before reaching the contents of the tumor.

The discussion at the *Académie de Médecine*, upon ovarian cysts, is still continued with the same interest. It would give me great pleasure to keep you informed in regard to the discussion, but to give you any thing like a correct idea of the positions and variety of opinions of the various disputants, would require more time and space than I can possibly devote to any one subject. At the close of the discussion, I may give a short resumé of the more important points discussed.

Speaking of ovarian cysts, reminds me of two cases of this, at present, interesting affection that I have observed since the commencement of the discussion, and which, from the unhappy termination of one, and the critical position of the other, are not without interest. One was in the wards of M. Piorry, the other under the care of M. Velpeau. The former was a cyst of very great size, and had been tapped twenty-five times without the least accident following any one of the punctures. M. Piorry proposed to draw off the water, and inject the sac with iodine. The cyst was emptied by means of an ordinary trocar, but the injection of iodine, from some defect about the syringe was deferred. Within the first twenty-four hours after the puncture, there was set up, a violent inflammation of the sac and peritoneum, which proved fatal in three or four days. Had the iodine been injected, the result would, in all probability, have been the same; and then, all would have readily agreed that the inflammation and death, was the result of the injection.

The case, in the wards of M. Velpeau, presented a much smaller cyst than the one above alluded to. It appears that some four or five weeks before my attention was called to this case, which was on the day of the second operation, a first puncture was made, and iodine injected without the least unpleasant symptom. The second puncture, as the first, was made with a common sized trocar; after the discharge of several pints of limpid serum, he injected a pint of tepid water to wash out the sac, that the iodine might more readily act. From the extreme difficulty in extracting the water injected, and for which M. Velpeau could not account, the injections of iodine was deferred. Acute inflammation of the sac and peritoneum followed, and at present, ten days after the operation, the patient is in an extremely critical position. The same

may be said of this case, as the one under the care of M. Piorry; and from the two, it would appear that it is more than probable that many of the accidents attributed to the injection of iodine, would have taken place without its use.

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PARIS, Nov. 25th, 1856.

As the remarks that I may make, from time to time, will have, to a very great extent for their basis, the clinics of M. M. Nelaton and Velpeau, it will perhaps not be amiss here, for me to say something of these two distinguished Surgeons; not as to whether they have blue or black eyes, handsome or ugly faces, but something more important—something by which one may be able to judge of the importance that should be attached to their peculiar views or doctrines.

There are, as you are apprised, several classes of surgeons: one class, for example, who believe strongly in the bistoury, and never let a chance slip without using it, if they can by any process of reasoning, however far-fetched, make it the least apparent that an operation is justifiable. This class of surgeons are always looking out for difficult and terrible operations, and if they have but seldom or never been performed, they are so much the better pleased. There is another class at just the opposite extreme, who, perhaps, are as irrational and as apt to lead astray as the former.

It is evident that, upon quite a number of subjects, the opinions of the above two classes of surgeons, would be widely different; and that our deductions, from a proposition emanating from a member of either, would depend greatly upon the class to which he belonged.

Between these two extremes, we find the rational and true surgeons; and of these, at Paris at least, we may make, with propriety, two classes: One who hold on with considerable tenacity, to the doctrines and precepts of the old school, contending that it is better to follow an old and well-beaten track, if it is a little longer and more tedious, than to attempt a shorter and more expeditious route, and run the risk of being ship-wrecked on the way. They, however, after the track has been surveyed, and found practicable, follow with considerable

grace. They may be denominated the conservative surgeons. The other class is less conservative—one not willing to receive the doctrines of the old school without investigation—one disposed to make progress—to experiment where it can be done without any great risk to the patient. At the head of the former, we find M. Velpeau; and with the latter, but perhaps more conservative than the majority of this class, we find M. Nelaton. It is unnecessary for me to speak of the attainments of M. Velpeau, as he is known by all. He has certainly done much for science, and enjoys at present, and deservedly so, the most enviable reputation of any surgeon living, it being as extensive as civilization itself. It is true that he is strictly conservative, but in this way, I am sure that he has done much for science, by acting as a stay to those of the young school, who would go too fast—arriving at conclusions without sufficient data. M. Nelaton is a link uniting the old and new schools, combining the good qualities of both, with but few of their faults. I consider him one of the most practical surgeons in Europe. He is a most excellent teacher, and fine operator—two qualities important in a clinical professor; and which renders his clinics exceedingly popular, his wards and amphitheatre being all the time crowded with students, as well as the profession of the city. But I must stop, as I have already extended these remarks much longer than I anticipated, for which I ask pardon.

There is, at present, in the wards of M. Nelaton, one or two cases of considerable interest. The first that I shall notice, is a very common affection, but from the treatment proposed, is certainly not without interest. It is a case of hereditary syphilis in a girl twelve or thirteen years of age, which has resisted all the usual plans of treatment. Caries of the bones of the cranium, and of the nasal bones, nodes and gummy tumors, &c., at various points, with the fact, that some years ago, the disease, once or twice, yielded to anti-syphilitic remedies, leaves no doubt as to the character of the affection. She has now been in the hospital several months, and notwithstanding the most active and appropriate anti-syphilitic remedies have been constantly administered, the disease has steadily progressed. M. Nelaton proposes in this case, syphilisation as it is called, which is, as you are apprised, a sort of saturation of

the system by means of numerous inoculations with the virus of a primitive chancre. The original proposition was to render the system refractory to syphilis, by repeated inoculations of the syphilitic virus; when they arrived at the point where the inoculations would no longer take effect, the subject was said to be in a state of syphilisation. The proposition was first made by M. Anzias Turenne, of Paris, about the year 1850, if I am not mistaken, as a prophylactic, as vaccination in small pox. Soon after, M. Sperino, of Turin, M. Morchal, (de Calvi,) of Paris, and some others applied it to the treatment of syphilis, and as they contended, with some results. In this state, in 1852, without any fixed or general laws, with but few friends or data, it went before the *Académie de Médecine*, and there received, as it was thought by all, its death-blow. The contempt with which it was received, and the anathemas hurled against it by that savant body, paralyzed even the warmest supporters of this new doctrine; so that in France, since that decision, nothing has been heard of syphilisation, at least publicly, until M. Nelaton's lecture, a few days ago, upon the case now under consideration. It appears, however, that the physicians of other countries have not been idle; that experiments, to test the value of the proposition, have been constantly going on.

M. Bœck of Christiana, has, perhaps, experimented more extensively than any other physician. He has recently published a brochure, of forty or fifty pages, in which is contained in detail, a number of experiments upon children. It was the result of these experiments that called M. Nelaton's attention to this subject; and if they are to be relied upon, and from the position of M. Bœck, we cannot well doubt them, there will, yet, something practical grow out of this, at first, apparently absurd idea. But to the case under consideration: The little girl has now been under treatment fourteen or fifteen days; from three to five inoculations have been made every two or three days; at first with the virus of a primitive chancre, more recently with the pus from the first inoculations. The inoculations are principally upon the arms and trunk. She has, at present, several crops of beautiful chancres. About the time of the appearance of the chancres, from the second inoculation, there was some constitutional disturbance; more

or less fever, for twenty-four or thirty-six hours, which was regarded by M. Anzais-Turenne, who is conducting the experiments, as a favorable indication. The patient is, at present, as cheerful as usual. I shall keep you informed of the progress of this case, from which so much is expected. It is, perhaps, not amiss here, to state, that according to the views of M. Bœck, this case, owing to previous treatment, which I am told has been to some extent, mercurial, is not a very favorable one to test the value of this new treatment—the results not being so satisfactory in cases where mercury has been previously administered.

A resumé of the pamphlet above alluded to, was published a few days ago, in the *Archives Générales de Médecine*, a translation of which, by J. J. West, M. D., of Savannah, I send you by to-day's mail.

The other case above alluded to, in the wards of M. Nelaton, is also not an unfrequent lesion; but in connection with the precepts of this distinguished surgeon, will, I hope, not be without interest. It is a traumatic aneurism of the bronchial artery, the result of an unfortunate venesection; the aneurismal tumor had been mistaken for an abscess, and an incision made, followed by a considerable hemorrhage, which was, however, readily arrested by compression over the point incised. Upon entering the hospital, which was some days after the incision, there was found, at the head of the above tumor, something, larger than a hen's egg, presenting all the signs of an aneurism: at the most prominent point, an incision from half an inch to an inch in length, had been practiced, through which could be readily seen the clot by which the hemorrhage was arrested.

What should be the practice in such cases? Shall we ligate the artery by the *ancient* or by the *modern* method, as they are called by the classics; but more properly, I think, by M. Vidal, denominated the *direct* and the *indirect* method? That is, shall we cut down upon the wounded vessel, opening freely the aneurismal sac, and ligate both ends of the artery, or shall we adopt the *modern* method—the *indirect* of M. Vidal—ligating the artery above the tumor? M. Nelaton said, that in a parallel case, he had once adopted the latter method, and in a few days had a secondary hemorrhage; he ligated the vessel a

second time nearer the trunk, and a few days after, had the same accident—the hemorrhage being from the distal extremity of the wounded vessel, making it necessary, at last, to open the aneurismal sac, and ligate both extremities of the artery. In the case under consideration, he made a free incision through the tumor, turned out the clot, and ligated both ends of the artery. The eleventh day after the operation, the ligatures were detached without any thing unpleasant; and now, the twentieth day after the operation, the wound has almost entirely healed. M. Nelaton contends, that the danger so much dreaded by some surgeons, of a softening and rupture of the artery, ligated when bathed in pus, is all imaginary. He says, that he has never yet met with such an accident where the artery was previously healthy, and he has ligated many surrounded by extensive abscesses. It is unnecessary to say, that in the above case, but for the incision in the aneurismal sac, the treatment would have been different.

Yours, &c.,

W. F. WESTMORELAND.

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“*Case of Hon. CHARLES SUMNER.* Read before the Boston Society, for Medical Improvement. By MARSHALL S. PERRY, M. D., Boston.”

Under the above title, we find, in a late number of the Boston Medical & Surgical Journal, what professes to be a *scientific* account of the case of Hon. Charles Sumner, for the *improvement* of the members of the Boston Medical Society. After stating what was very important to the advance of medical knowledge, that the \**“assault was made upon Mr. Sumner, in the Senate of the United States, on Thursday, May 22d,”* (which, by the way, is not true, unless the Senate Chamber constitutes the Senate,) we have a very confused and unsatisfactory account of the injuries sustained, as an example of which, it is stated that “the gashes went through the scalp to the bone, which was laid bare, but it is *supposed* not fractured.”

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\*The italics are ours.



It seems to us, (though we do not profess to be much of a surgeon,) that it ought to have been determined whether there was *really* any fracture of the scull, in so important a case as that of the Hon. Charles Sumner, whose injuries have been called by Dr. Wendell Holmes, (we believe,) "the wounds of the nation."

It seems that he remained for some time in Washington city, and next, in the progress of this remarkable case, he turns up in Philadelphia, where, under the care of Dr. Wistar, he was found to be in "a state of extreme nervous exhaustion, (very natural result of fright, almost unto death,) "but no evidence of organic disease;" and we then here of him on the Alleghany Mountains, in Pennsylvania, where, under the influence of mountain air, mountain water, and change of climate, there was a gradual stringing up and intonation of the whole body; until, in about five weeks, the improvement was so great "that Mr. Sumner could not be *persuaded* that he was still an invalid." He finally returned to Boston, where it seems that he has gradually recovered his appetite, "*and sleeps much better than he did*;" though with all his travels and advisers, the *scientific* reporter naively acknowledges that "it is impossible to decide, with absolute certainty, what the pathological condition of Mr. Sumner's brain has been," and winds up with the sapient conclusion, that "*had the patient died, a post mortem examination would have determined conclusively, the character of the injury.*"

As it might not be known generally, we will state that this is the report of the physician who was called all the way from Boston, to attend the individual, whose condition he professes to describe.

We must express our regret that such an article should have appeared in so respectable a journal; and particularly that the editor should have called special attention to it, when, from his own acknowledgement, "notwithstanding the careful observation of the patient, by eminent medical men, it is difficult to say what is the exact nature of the lesion;" the legitimate deduction from which, we have a right to conclude, from all the circumstances, is, that it has been a case manufactured for the occasion.

We do not know that this matter would have been noticed

(having become so much accustomed to similar exhibitions of fanatical influence), but for the frequent protests from Northern journals, &c., against what they term "Sectional Medicine."

What particle of scientific information is conveyed by the report of the above case, we are utterly at a loss to perceive; and it seems to us to come with a bad grace, from those who are constantly expressing opposition to the introduction of political matters into scientific discussions; who even protest against the effort upon the part of Southern Editors and Southern Colleges, to build up Southern medicine, by the patronage which *belongs to the soil*.

It is our intention to use whatever influence we may possess, for the up-building of the South, in every particular; for the advancement of all the interests, whether political, commercial or educational, and to this end we shall especially advocate the education of Southern men, upon Southern soil; and an entire disruption of the cords of vassalage which have so long bound us hand and foot to the North—if this be "*Sectional Medicine*," then are we, its advocates.

If the most liberal and generous spirit in every particular, had been manifested upon the part of the North, towards our section of the Union, the most ordinary regard for the prosperity and independence of the region in which we make our homes, it seems to us, should prompt the advocacy of such views; and when we have a large majority of the whole people of the Northern portion of the confederacy prepared to upturn our very foundations, it is time, we think, to begin to take care of ourselves, and at least cease to add to the strength and power of those, who need but little more, to become our oppressors in, or to force us out of, the Union.

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#### THE COLLEGE EDIFICE, &c.

We learn that it is a matter of surprise with some, that the Faculty of the Atlanta Medical College are able to erect a large and costly Edifice, and send a Professor to Europe, and to do divers other things (among which may be, perhaps, the purchase of, what is said to be, the finest Chemical Apparatus in the South-

ern country) that have not been thought possible, except by Institutions that have been endowed, or those of long standing.

To this very natural curiosity (while in every instance it may not proceed from the best motives, and might not, therefore, be entitled to gratification), we would reply, that there has been such entire confidence in the success of the Institution, and such unity of purpose in the Faculty, that they have not hesitated to embark their means in the enterprise, which must now be admitted upon all hands, to be one of the most successful, that has ever been undertaken in the United States; so far as we know or believe, having only been exceeded by the University of Nashville, in the number of the class in attendance, at the same period from its commencement.

As stated in our last number, we can assure those who feel interested, that the College Edifice will be in readiness for the next term; and in addition, that we shall be prepared with proper anatomical material, and all the necessary appliances for successful teaching.

The growth of Atlanta, itself, has been an enigma to many, but notwithstanding incredulity and predictions of evil, the city has continued to grow, and is now admitted to have a successful future; and with the almost certainty of another railroad, and the strong prospect of it being the future capital of the great State of Georgia, it is indeed difficult to put a limit upon the progress of the place. We can, then, point those who wonder at the remarkable success of the Medical College, to the fact, that it is in the city of Atlanta, whose history has been, and will continue to be onward, notwithstanding every effort to the contrary, upon the part of those whose interests have been, or are supposed to be, in conflict with her prosperity. But to return from this digression, and to conclude what was intended to be little more than a paragraph, we would say in conclusion, that from all the information we can get, and the data from which we have a right to judge, we shall number in the next class a large increase upon the last.

☞ This number of our Journal will be sent to a number of physicians who are not subscribers, and while we should be pleased to consider them as such—having had numerous assurances that we are publishing a journal that is worthy of patronage—we have no disposition to annoy them by continuing to send it, in opposition to their wishes; they will, therefore, do us the favor to return the number if they are not disposed to be considered subscribers.

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☞ At the suggestion of a friend, we would again state, that this Journal is intended to be accessible to the communications of any respectable medical man, who is pursuing his profession in a regular way; and contributions are earnestly solicited, with the assurance that they will, at all times, be treated with proper respect and courtesy, without, however, any assumption of responsibility upon the part of the editors, in reference to the views entertained by their correspondents; and with the distinct understanding, that whatever appears in the Journal, will be subject to the courteous criticism of the profession.

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☞ We can furnish the back numbers of the present volume to new subscribers, if desired; as will be perceived upon examination, it commences in September.

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## PHYSIOLOGY.

*Lectures on Comparative Physiology*, by M. FLOURENS. Translated for Charleston Medical Journal and Review, by F. PEYRE PORCHER, M. D., Charleston, S. C.

SUMMARY.—*Paleontology*—The DEAD and the LIVING periods in the History of the Earth—Ideas of Descartes and Leibnitz upon the Primitive Incandescence of the Globe.

We have now reached the study of the fourth great question of Positive Ontology, to wit: the destruction of living beings in the different ages of the globe. After *Neontology*, we proceed to investigate *Paleontology*.

We know the present state of the animal population, which is distributed upon the face of the earth, according to the law of climates. The

condition of things of to-day, has it always existed? No; the actual species have been preceded by other species, otherwise distributed upon the globe, and which numerous revolutions have successively destroyed. The same revolutions, in upsetting the surface of the earth, have accumulated ruins which form the soil upon which we now live—soil still scarcely settled; the tremblings of the earth, volcanoes which explode at intervals, are the weakened echoes of the grand commotion of other times.

The history of the globe comprehends two periods: 1st, that when life had not yet appeared—I call it the *dead* period; 2nd, that where life manifested itself—I call that the *living* period.

I will follow, in the examinations, not the order of time, but the order of our discoveries.

The first fact which has revealed to us a past differing from the actual arrangement, is the discovery of marine shells upon the dry earth. How- ever little we penetrate the soil, they are everywhere to be found, even at great distances from the sea, and upon very considerable elevations.

The sea, at a certain epoch, actually covered the now dry earth; and, in retiring, it has left its shells deprived of their ancient inmates. The layers of earth which contain these marine shells are themselves other witnesses of the sea's sojourn. It is, indeed, the work of the waters; these are the sediments of those waters which formed them: thus we see them always disposed in horizontal lines.

Another essential circumstance: these horizontal layers having terminated at the foot of a mountain, there we find other layers more or less vertical. In other words: in the beginning, these oblique or vertical strata have been disposed horizontally; a cause which I will explain further on, has righted them up. They plunge under the first, where we found the layer of shells; and they themselves contain shells, but of species and genera very different.

The waters, then, have rested upon the face of the earth at different epochs.

This is not all. In searching more in advance, we reach strata which furnish the remains of mammifers; more profoundly still those of reptiles; then the remains of fish, and other shells still. The layers of marine animals alternate with the layers of terrestrial animals.

We are then warranted in concluding from all this that at different intervals the sea has successively covered the earth, and successively left it. It is easy, after the evidences furnished by observation, to conceive of what has been accomplished in these ante-historic epochs. The waters, in violently displacing themselves, on one side, left dry a marine population, whilst on the other, they submerged a terrestrial one. Frightful destructions, to which succeed others not less frightful: the sea, resuming her ancient bed, found there terrestrial animals that it destroyed in their turn; whilst that, behind it, numerous marine animals perished upon a soil given back once more to terrestrial life.

Such has been the *living* period.

All these facts are deduced rigorously from observation. Nothing in the preceding recitation has depended upon hypothesis. In fine, if we search to a still profounder depth, arriving at primitive strata, to that which constitutes the *ground-work* of the globe, we find no more animal remains. There was then an epoch when life did not exist upon the

globe; and that is the *dead* period. This phase in the history of the globe, offers phenomena of a very different kind.

During the *living* period, water was the great agent which manifested itself. Its displacement caused immense destruction of living beings; the water produced the successive layers of sediment: it is that which has fashioned, so to speak, the globe as to its external envelope. During the *dead* period, the agent which showed itself was fire. Every thing bears proof, we will see, that in the beginning the globe was incandescent—liquified by fire throughout its mass.

Fire and water, these are the two forces which have acted in the infancy of the earth. Every effort, every object, even of Geology, is to separate, to-day, in the contexture of the globe, that which was the effect of fire, from that which has been the effect of water.

Primitively, the globe was incandescent. This great idea, if, since a quarter of a century, we had not followed the progress of the science, would be enough to astonish us, and profoundly. Now we are familiarized with it.

The first to conceive so bold an idea, is Descartes. But with him this conception was not derived in any manner from the direct examination of the natural phenomena: it is a simple speculative application of certain physical laws which he had imagined: it bound itself with his celebrated system of *vortices*.

According to Descartes, all matter is composed of particles of three kinds: 1st, the finest for the *first element*; 2d, the globular particles, which are those bodies rounded by friction, form the *second element*; 3d, the largest pieces, and which preserve more angles, constitute the *third element*.

These elements, of which all space is full, move in *vortices*, the one around a centre, the others around another; each one at the same time, and at each instant, is drawn on by a centrifugal force.

The larger the matter is, the more it diverges from the centre. On the contrary, the finest powder (first element) has ranged itself at the centre and constitutes a *sun*. Each vortex has its collection of fine powder, its sun—all these *suns*—centres of as many vortices, that we call the *stars*.

The globular matter (second element) being composed of unequal globules, the largest diverge nearest the extremities of the vortex, the smallest maintain themselves nearest the sun; the fine dust which composes the sun communicates its agitation to the neighboring globules, and it is in that that *light* consists.

Lastly, in continuing these hypotheses, Descartes came to imagine little vortices of matter which rolled with the great. Each of these little vortices contained also globular matter, and, at the centre, an aggregation of fine dust which, in the beginning, formed a little *sun*. But as it contained, besides, heavy bodies, the brightness (bursting) of broken angles (third element,) these particles, collected together in thick clusters, gained the extremities of the little vortex, by the superiority of their centrifugal force; they obscured it; crusted it over little by little; and of these crusts thickened over all its surface, is formed an opaque body, a *planet*, a habitable *earth*. Thus the *earth* is an *encrusted sun*.

These ideas of Descartes are, as you see, purely abstract ideas. The great Philosopher of the XVIIth century, allied his ideas to fact; a

method which has merit in Metaphysics, but which is not acceptable in Physics, nor in Natural History. In these Sciences, the power of ideas is essentially subordinate to the power of facts.\*

Leibnitz has arrived at the same conception as Descartes, but by a different route, by observation.

The matters, melted and calcined, which are found within the entrails of the earth, had given to Leibnitz, the idea of a general conflagration. In his treatise entitled *Protogœa*,† Leibnitz said that the earth and other planets were, in the beginning, luminous stars by themselves. After having burned a long time, they became extinguished for want of combustible matter, and became opaque bodies. The fire has produced, by the melting of the matter, a vitrified crust. The base of all the matter which composes the earth is glossy : *facile intelligis vitrum esse velut terræ basin*.

If the presence of melted matter in the bosom of the earth had revealed to Leibnitz the primitive incandescence of the earth, another observation, that of the dispersion of fossil shells over the whole surface of continents, had given him the idea of a general submersion. When the crust of the earth was cooled, he tells us, the humid particles, which were raised in the form of vapor, fell back again, and enveloping the whole globe, constituted the seas.

Thus, Leibnitz had drawn from the observation of these two great facts, the conflagration and the submersion of the globe.

These ideas of the German thinker made no sensation at the time. The century was not prepared to receive them. The *Protogœa*, written in Latin, did not leave the bookshelves of the learned. It required, for the triumph of the ideas of Leibnitz, that Buffon should take them up in the second half of the XVIIIth century and give to them a new power, that of eloquence.

1. OBLITERATION OF THE PORTAL VEIN AND THE SECRETION OF BILE.—At the meeting of the French Academy of Sciences, Sept. 1, 1856, M. Oré presented a paper, detailing a series of experiments, made with a view to ascertain the influence of obliteration of the portal vein, upon the secretion of bile. The experiments were undertaken at the instance of M. Gintrac, of Bordeaux, who had observed, in his practice, a case which seemed to contradict the ordinarily received physiological doctrine, which teaches that the portal vein furnishes the liver with the materials for the secretion of bile.

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\* The system of vortices was, in the XVIIth century, a subject of serious controversies. In the XVIIIth, Voltaire was not the last to laugh at it; we read in the *Dialogues d'Evhemere*: "*Evhemere*: Cardestes (Descartes) has supposed that our nest was at first an encrusted sun. *Callicrate*: A sun crusted over! you laugh. *Evhemere*: It is this Cardestes doubtless who jested when he said that we had been once a sun composed of matter subtle and matter globular; but that, our matter being thickened, we have lost our brilliancy and our force: we have fallen from a vortex of which we were the centres and the masters, into the vortex of the sun of to-day: we are all covered with matter branching and channelled; in fact, of the star that we were, we have become a moon, having around us, by favor, another little moon to console us for our disgrace."

Now the system of vortices is forgotten.

Descartes is not less the immortal author of the *Discours de la Methode*.

† This Treatise appeared in 1683, in the *Actes de Leipzig*.

The following are the author's conclusions :

"1. The secretion of bile having continued, after the partial and the complete obliteration of the portal trunk, I have concluded that it is not the blood of this vein which supplies the liver with material for its secretion. The gland is therefore dependent for its secretion upon the blood of the hepatic artery. The biliary secretion, like all others, is derived from the circulation of arterial blood. I have elsewhere established, that obliteration of the hepatic artery is not the proper means of testing the question, and cannot be considered, therefore, as weakening the conclusions which I am about to state.

"2. The secretion of sugar, by the liver, not having been altered by obliteration of the portal vein, is it not evident, as proved by M. Claude Bernard, that the production of saccharine matter is a proper secretion of the liver, and entirely independent of alimentation ?

"3. The albuminous and glycogenous matters resulting from the digestion of feculent and albuminoid substances, being prevented from passing through the liver, are nevertheless not lost to the system, but enter the inferior cava vein by an anastomotic branch from the superior mesenteric vein.

"4. Finally, and it is with great hesitation that I put forth the statement that arterial blood does not perform so important a part in the formation of sugar in the liver as in the secretion of bile."

After the reading of this paper, M. Andral stated, that in his medical practice, he had observed a fact which fully substantiated the conclusions of M. Oré. A patient in whom there was reason to suspect, in consequence of external signs, an obliteration of the portal vein (a suspicion which was subsequently confirmed by an autopsical examination,) not only did not present symptoms indicative of a suspension of biliary secretion, but yet gave evidence of a persistence of the glycogenous function by the occurrence of a diabetes.—*Revue Médicale*, Oct 15, 1856. [Can it be possible that the distinguished medical savans of the French Academy, are ignorant of the fact, established by Kiernan and others, that the capillary terminations of the hepatic artery end in venous capillaries which open into the adjacent subdivisions of the portal vein, and are not, therefore, the radicles of the hepatic veins? A knowledge of this circumstance would, it seems to us, have furnished sufficient explanation of the continuance of the biliary secretion after obliteration of the portal trunk. But even if this were not the case, another fatal objection to the conclusions of M. M. Oré and Andral is to be found in the fact that, when the portal vein is tied, its blood of course enters the general circulation, and in this way no small portion of it reaches the liver by the hepatic artery.—ED.]

2. THE TEMPERATURE OF THE BLOOD LOWERED BY PASSING THROUGH THE LUNGS.—At the sitting of the same Academy, on the 15th of September, 1856, M. Claude Bernard read the continuation of his "Experimental Researches upon Animal Temperature," the second part of which relates to the modifications of temperature which the blood undergoes in traversing the respiratory organs. These experiments were made upon living animals, and M. Bernard thinks himself justified in coming to the following conclusions :

"1. That the circulation of the blood through the lungs causes a depression of the temperature of that fluid.



"2 That the lungs cannot therefore be considered a focus of animal heat.

"3. That the conversion of venous into arterial blood in the living animal, is not coincident with an augmentation in the temperature of that fluid, but, on the contrary, with a depression of its temperature."

In his next communication, M. Bernard proposes to examine into the modifications of temperature which the blood experiences in circulating through the genito-urinary apparatus.—*Ibid.*

[At a previous meeting of the Academy, M. Bernard, in a report of his experiments upon the modification of the temperature of the blood in its passage through the liver, established the fact that the blood is actually much warmer as it comes from that organ, than it is previous to its entrance.]

3. COAGULATION OF THE BLOOD.—In a recent letter to the London Lancet, Dr. Fred. W. Headland proposes a theory in regard to the coagulation of the blood, opposed to that advocated by Dr. B. W. Richardson, in his prize essay.

SIR :—When, considering the subject of the chemical history of diabetes, in the year 1853, I was led, amongst other things, to conceive a certain theoretical explanation of the spontaneous coagulation of the blood. Having just now read over and reconsidered my notes taken at that time, I must say, that I still prefer my theory to the one recently promulgated by Dr. B. W. Richardson, which it resembles in some points.

The statement, which I append below, is copied nearly verbatim from the notes referred to, but I may premise that the part of the idea which applies to *vegetable* physiology, is the only part to which I have given any publicity, as at the time when it occurred to me I considered the whole matter of little moment.

The albuminous or nitrogenous matter found in the young growing cells of a *plant*, is in an insoluble condition. But on its passage in the fluids to those cells it must have been in some manner held dissolved in water. So, when the young cells get old and woody, they no longer contain this albuminous matter. On leaving them for the younger parts, it must again have assumed the soluble state. It seems to me that this phenomenon may be accounted for by supposing the albumen to be dissolved by an *alkaline* condition of the fluids, and deposited in some manner by the development of an *acid* at the particular point required.

The same may occur with the fibrine of animal blood, more prone to to such coagulation than albumen. In the tissues nourished by that blood it occurs in an insoluble form. But in the venous blood which carries away the effete products of those tissues, the fibrine is once more found in a state of solution. We are tempted to explain these facts in the same way as above: to suppose the fibrine held in solution by the presence of an alkali, and deposited in the insoluble form by the development of an acid. And, *in fact*, the blood is known to be feebly alkaline (from the presence of the carbonate or basic phosphate of soda,) and the juice of muscle was found by Liebig to have an acid reaction.

But how is it, that when the blood is withdrawn from the living body, its fibrine quickly assumes the solid or insoluble state—*i. e.* coagulates? By parity of reasoning, I suppose that this takes place again, by the development of an acid, to such an extent as simply to neutralize alkalinity,

not so as to precipitate the albumen; this acid I believe to be *lactic acid*. It has been lately shown that glucose is always present in the living blood; and further proved, as I believe, that this glucose is continually changing into lactic acid, which, as fast as it forms, is bound or combined with oxygen to support the animal heat. When the blood is isolated, this vital process of combustion goes on no longer, lactic acid accumulates, the alkalinity of the natural blood is neutralized, and the fibrine coagulates. A tendency to nitrogenous decomposition may hasten this process, by supplying a ferment to act upon the glucose. Blood drawn in fevers coagulates quickly. Diabetic urine, allowed to stand for a time, may lose its sugar, and contain lactic acid. Extensive coagulation of the blood in the living body may be caused by injecting a putrifying liquid into the veins.

Another time I propose to comment at length, upon the theory of Dr. Richardson, and to state the motives which induce me to dissent from it. I am also planning a series of experiments, in order to put to a satisfactory test, the truth or falsity of the hypothesis sketched above.—*The Lancet*.


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*Tragic End of John Hunter.*—This distinguished surgeon, as our readers are aware, was attached to St. George's Hospital, London, and his temper was often sorely tried by his colleagues as well as by the governors of the hospital, who bitterly opposed what he termed his "innovations." Hunter had long been a sufferer from cardiac disease, and dreaded the effects of mental excitement, to which his irritable temperament rendered him constantly exposed. The last act of his enemies, and its melancholy result, are thus recorded by his biographer, Mr. Otley:

"A committee was subsequently appointed to draw up a code of rules for regulating the admission and instruction of pupils; and a set of proposals was submitted to them by Mr. Hunter's colleagues, which was agreed to without his having been even consulted on the occasion! Many of the regulations adopted continue in force to this day; others, and especially those relating to the better instruction of the pupils, soon fell into disuse; and some seem to have been especially directed against Mr. Hunter. Amongst these latter, was one which determined that for the future, no person should be admitted as a student of the hospital without bringing certificates that he had been educated to the profession; a regulation which was probably designed to exclude Mr. Hunter's countrymen, who sometimes came up to town recommended to him, and entered as his pupils at the hospital, without having had any previous medical instruction. Nor was this clause long in taking effect; for in the autumn two young men, who had come up to town ignorant of this new regulation, applied to Hunter to be admitted under him at the hospital. He informed them of the law which had been passed, but undertook to press for their admission at the next Board-day, and directed them to furnish him with a statement of their case in writing. On the 16th of October the Board was to meet, and Hunter proposed to fill his

promise, though he was so well aware of the risk he incurred by undertaking a task which he felt would agitate him, that in mentioning the circumstance to a friend who called on him in the morning, he expressed his apprehension lest some unpleasant dispute might occur, and his conviction that if it did, it would certainly prove fatal to him. At his accustomed hour he left his house to commence his morning rounds, and by accident forgot to take with him his list of appointments; he had left the house but a few moments when it was discovered, and Mr. Clift, who was then residing in his house, hastened with it to York Street, St. James, the first place on the list, where he found the carriage waiting. Hunter soon made his appearance, took the list, and in an animated tone called to the coachman to drive to St. George's. Arrived at the hospital, he found the Board already assembled, and entering the room, presented the memorial of the young men, and proceeded to urge the propriety of their being admitted. In the course of his remarks, he made some observations which one of his colleagues thought it necessary instantly and flatly to contradict. Hunter immediately ceased speaking, retired from the table, and struggling to suppress the tumult of his passion, hurried into an adjoining room, which he had scarcely reached, when, with a deep groan, he fell lifeless into the arms of Dr. Robertson, one of the physicians of the hospital, who chanced to be present. Dr. Baillie had immediately followed him from the Board-room, and Mr. Hume, who was in the house, was also summoned to his assistance. Various attempts were made for upwards of an hour to restore animation, under the hope that the attack might prove to be a fainting fit, such as he had before experienced, but in vain; life had fled; and all their efforts proving useless, his body was placed in a sedan chair and conveyed to Leicester-square, followed by his now vacant carriage."—*Western Lancet*.

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 We would desire to call attention to the prospect of additional interest connected with our Journal, from the correspondence and reports of Dr. Hart of New Orleans, (now in Paris, where he will remain some time longer) an allusion to which, has been made in the late correspondence of Professor Westmoreland, who will shortly leave Paris for Edinburgh, from which point, the latter will continue his interesting communications.

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#### RECEIPTS.

J. T. House, N. C., 2d vol.; J. M. Couch, Ga., 1st and 2d vol.; J. P. Taylor, Ga., 1st and 2d vol.; Jos. T. Bond, Ga., 2d vol.; Jno. Coston, Ga., 2d vol.; Wm. Burch, Ga., 1st and 2d vol.; Jno. Stone, Ga., 1st vol.; Wm. A. Bennett, Ala., 2d vol.; Jno. Venable, Ga., 2d vol.; O. H. P. Slaton, Ga., 1st vol.; J. M. McMichael, Ga., 1st vol.

~~✂~~ We have received the "Prospectus of the North Carolina Journal of Medicine & Surgery," too late for notice in the present number—it will be attended to in our next.

### METEOROLOGICAL OBSERVATIONS FOR JANUARY, 1867, AT ATLANTA, GA.

| JANUARY. | TEMPERATURE. |         |         | WIND. | REMARKS.                         |
|----------|--------------|---------|---------|-------|----------------------------------|
|          | 7 A. M.      | 2 P. M. | 7 P. M. |       |                                  |
| 1        | 85           | 42      | 36      | E.    | Cloudy.                          |
| 2        | 84           | 36      | 35      | E.    | Cloudy—Rain $1\frac{1}{4}$ inch. |
| 3        | 34           | 41      | 29      | N. W. | Fair—Windy.                      |
| 4        | 22           | 41      | 30      | N. W. | Fair.                            |
| 5        | 28           | 52      | 38      | N.    | Light clouds.                    |
| 6        | 34           | 45      | 34      | N. W. | Fair.                            |
| 7        | 29           | 42      | 29      | N. W. | Cloudy—Rain 3-16 inch.           |
| 8        | 24           | 32      | 26      | N. W. | Light clouds.                    |
| 9        | 24           | 40      | 28      | W.    | Fair.                            |
| 10       | 36           | 40      | 30      | N.    | Cloudy—Rain $\frac{1}{2}$ inch.  |
| 11       | 22           | 30      | 24      | N. W. | Fair.                            |
| 12       | 20           | 35      | 32      | W.    | Fair.                            |
| 13       | 30           | 40      | 30      | W.    | Fair.                            |
| 14       | 27           | 50      | 43      | W.    | Fair.                            |
| 15       | 26           | 36      | 24      | N. W. | Fair.                            |
| 16       | 28           | 38      | 34      | N. E. | Cloudy—Drizzily.                 |
| 17       | 36           | 42      | 41      | S. W. | Cloudy—Rain $\frac{1}{2}$ inch.  |
| 18       | 18           | 14      | 12      | N. W. | Snow $1\frac{1}{2}$ inch.        |
| 19       | 2            | 18      | 14      | N. W. | Fair.                            |
| 20       | 12           | 32      | 32      | E.    | Cloudy—Light Snow.               |
| 21       | 32           | 35      | 16      | N. W. | Fair.                            |
| 22       | 6            | 20      | 18      | N. W. | Fair.                            |
| 23       | 12           | 28      | 20      | N. W. | Snow $\frac{1}{2}$ inch.         |
| 24       | 16           | 35      | 30      | N.    | Cloudy.                          |
| 25       | 30           | 42      | 34      | N. W. | Fair.                            |
| 26       | 34           | 44      | 36      | N. E. | Light clouds.                    |
| 27       | 36           | 54      | 38      | E.    | Light clouds.                    |
| 28       | 42           | 54      | 50      | S. E. | Cloudy—Rain $\frac{1}{2}$ inch.  |
| 29       | 48           | 50      | 44      | N. E. | Cloudy—Rain $\frac{1}{2}$ inch.  |
| 30       | 38           | 38      | 35      | E.    | Cloudy—Rain $\frac{1}{2}$ inch.  |
| 31       | 34           | 40      | 38      | W.    | Fair.                            |

Furnished by

J. G. WESTMORELAND, M. D.

# ATLANTA Medical and Surgical Journal.

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VOL. II.]

MARCH, 1857.

[No. 7

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## ORIGINAL COMMUNICATIONS.

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### ARTICLE I.

*The late JOHN NORCOM, M. D. By S. S. Satchwell, M. D.,  
of New Hanover county, North Carolina.*

DIED, in the town of Edenton, North Carolina, on the 22d of January, 1856, of pulmonary apoplexy, JOHN NORCOM, M. D., in the fifty-fifth year of his age.

He was a man of mark in the profession and in the community. Frank, educated, and high-minded as a man, he was skillful, high-toned, and accomplished as a physician. I knew him long and well—I was his office pupil. Then, and always afterwards, he honored me with his confidence and friendship. I am unwilling that a physician of his character, and a man of his undisputed worth, should pass away unnoticed.

It is due to the profession, that the character and services of our leading medical men should be made public.

The life of the physician is one of gentleness and a devotion to ministrations for the relief of suffering humanity, rather than of show and selfish aims. They know but little of the properly educated physician, who charge that his great aim is money. He must eat and drink, and love an independent subsistence like other men, it is true; but the cares and anxieties and labors of such a man are based on higher motives, nobler impulses than the love of mammon.

In the hour of danger, he is greeted with warm and grateful welcome ; in seasons of pestilence, he is hailed as the benefactor of his race. But when these trying times are over, how soon are his services forgotten ; and when he dies, how soon does his name become cold in the hearts and upon the lips of men. Look around you in society, and who are the men that receive the honors and emoluments of life ? Noisy political demagogues, factitious statesmen, visionary reformers, cunning speculators, and other pretenders in the various walks of life. These are the men who are crowned with popular applause, and with what the world calls success, while the real benefactors of our race, the men of science and worth, and honor, scorning to degrade themselves by using unworthy means of advancement, are elbowed aside by these pressing throngs of unscrupulous aspirants for power and wealth. In such a contest, and in such an age of restlessness, and shallow pretensions, the physician of genuine worth and merit, is apt to live unrewarded and to die unnoticed.

But it is not our purpose to dwell on these things, nor to descant on the merits of the medical profession farther than to remark, that no profession is so laborious and self-sacrificing as ours, and none so poorly rewarded in purse and public reputation.

Dr. Norcom was born and raised in Edenton, N. C. He was educated under the watchful eye of his father, Dr. James Norcom, an excellent scholar, and one of the most distinguished physicians of his day. John Norcom graduated with honor in the collegiate department of the University of Pennsylvania. He studied medicine under his father, and graduated in the medical department of the University of Baltimore. He then practiced with his father a year or two, deriving great advantage from his experience. He then removed to Washington county, and practiced with success. He gained here, rapidly upon public favor ; but he desired a better field for his talents ; and in a year or two more removed to the town of Washington, in Beaufort county. There he soon took the lead in his profession. His skill and unwavering attachment to his profession, which ever characterized him, secured him a large practice, and many friends. But his young ambition urged him to seek a still better field of exertion. He removed

to Baltimore, under favorable circumstances, and commenced practice. He did well. His social and professional walks in this city, were in the front ranks of the profession. But a severe and contagious disease brought affliction in his family. His wife became dissatisfied with Baltimore. His relatives and friends in North Carolina were strong and incessant in their petitions to him to return. He yielded. He gave up all his flattering prospects in Baltimore and returned to the town of Washington. He soon regained the large and profitable practice he had previously left, and re-instated himself as the leading physician in that whole section of country. This position he continued to maintain as long as he lived. He was well worthy of the distinction.

His fondness for his profession was proverbial. It caused him to store his mind, well disciplined by early training, with a vast amount of professional learning. The doctrines of the older authors, as well as the views of modern writers and contemporary practitioners were familiar to him. He kept himself well posted up in progressive medicine. With a mind thus learned and devoted, he brought to the bedside, a power of analysis, an accuracy of examination, and a judgment in the application of remedies, rarely surpassed. It was this fine discrimination, this power of analysis, and of applying remedies accordingly, that gave to him, as to every successful practitioner, such fine success in the treatment of disease. Hence it was, that his counsels were so often invoked in difficult and complicated cases far and near. It was on such occasions, so well calculated to try the metal of the physician, that Dr. Norcom was always ready. He was, indeed, a blessing to the community. Often, when superficial medical minds were torturing instead of relieving the patient, by prescribing for *effects* and ambiguous symptoms, would he apply his critical mind to the investigation of the case, discover the *causes*, often hidden, and obscure, and by an appropriate corresponding treatment, cure the case, and bear away the palm of victory. But he would never use it to the injury of the attending physician; rather would he seek to bolster him up, unless his conduct was intolerably outrageous. Often has it happened, that patients, afflicted with some severe and lingering chronic disease, have gone the rounds among regular and irregular practitioners,

sometimes remaining for months under the treatment of some celebrated physician at the North, and at last, without relief and in the agony of despair, have applied to Dr. Norcom, and were cured by him. But Dr. Norcom lived in plain old North Carolina—too artless and honest to proclaim her renown in the popular bugle blasts of the times—and he never stood at the corners of streets to publish his own deeds; and hence, such triumphs of skill are unknown abroad.

When not engaged in active practice, he was at his office poring over his books—studying his cases, or in the bosom of his family instructing his children. He had no time for light company, or the frivolous pleasures of the day. That time, which so many give to such frivolities, was appropriated by him, to more intellectual enjoyments, and to nobler purposes. His office was never sought by idlers, politicians, or demagogues: Dr. Norcom was not the man to give countenance to such characters. His friends were select, and no man enjoyed the company of his friends, at proper seasons, with a better relish, than he did. In refined and cultivated social circles, he was at home, and the delight of the company.

I have said, that in the hour of danger, hope and confidence settled upon him. At such times, even his bitter, personal enemies invoked his assistance, and he cheerfully extended it. In difficult cases, he was sent for far and near, to obtain his services in consultation. His practice was extensive, and he applied himself to it with much zeal and perseverance.

He had an elevated sense of the duties and responsibilities of his profession; he did all in his power, to add to its elevation and dignity; he disdained everything that was low and mean, both in and out of the profession; and he rebuked imposture and impertinence wherever he found either. He scorned those little tricks and artifices, so often used by narrow minds and mean men, to obtain practice. He often incurred the hatred of such men as a matter of course; but, he pursued the even tenor of his way, and made no compromises with demagogueism, dishonor, or dishonesty. His was the open, free, generous, independent spirit. Whatever his own judgment and conscience conceived to be right, he did and said; never enquiring what effect it would have upon his own popularity—he relied on his own worth and merit for success.



To his own brethren in the profession, he was kind, courteous and honorable. It was only in cases where the common feelings of professional honor and brotherhood were grossly infringed upon, by some empirical pretender, or diplomæd quack, that the vials of his wrath were stirred, in a professional sense. To the younger members of the profession, especially just starting in life, he was kind and encouraging; ever ready to aid them with advice and sympathy, and by putting into their hands profitable practice. He did not believe that gray hairs constituted wisdom, or in the anti-republican doctrine of hereditary transmission of practice. But, whenever any young medical man of honor, talent and merit, settled in the same town, or near him, however humble his origin, or oppressed by poverty, Dr. Norcom sought him out and did all he could to advance him. That deference which others have for the aristocracy of wealth or blood, was never felt nor shown by him; but the aristocracy of mind and merit secured his homage and esteem. He was emphatically a man of *principle*. For this, he was ready, with Roman firmness, to battle from the first to the last, and always; he would make no concessions to what is called policy, and no compromises with injustice or meanness, come from what quarter they might. He could look with no favor upon wealth or distinction obtained by intrigue or foul means.

In politics, he was never a partisan, but a patriot, warmly devoted to the interests of his native State and country. The dirty work of politicians; the degrading character of party tactics; the dishonorable means of all parties to obtain success, were so disgusting and revolting to his elevated feelings and high character, that he would never be a working member of any party, but sometimes voted with one party, and then again with another. He never believed that subserviency to party yoke was an element of patriotism. With his talents, he could have wielded vast political influence, if he had consented to sacrifice his independence and become a pliant party man.

Whatever affected the community in which he lived, he was always interested in, and manifested it by his advocacy of all those measures of moral and sanitary reform, that were for good. The cause of education secured his active exertions;

and his benevolence was aroused by whatever was proposed for the moral, educational and religious interests of mankind.

Dr. Norcom committed the fault, common to the profession in North Carolina, of writing but little for the medical press; and, yet, he was one of the best writers in our State. Much has been lost to the profession by this omission on his part, to record his views, derived from a long and discriminating observation and experience, in the practice of medicine. He conversed with much fluency and ease, and was a lucid, logical and forcible speaker. His powers of writing and speaking, added to his acquirements and professional enthusiasm, would have enabled him to adorn a Professor's Chair, in any of the Medical Colleges. More than one application of this sort was declined by him. He preferred the private practice of his profession in the old North State.

His character, as may readily be supposed, made him strong friends and bitter enemies. The former clung to him through evil and through good report. The latter, now that he is gone, will not deny to him, good intentions, incorruptible integrity, superior talents, lofty purposes and elevated principles. In his friendships, he was sincere, reliable and disinterested; and when he made a friend, he adhered to him with idolatrous devotion. In this respect, and in his relations with his family—his love for his father, mother, brothers and sisters—his affection for his wife and children, I have never known a man to possess more fidelity, more attachment, more purity and ardor of love and affection. He evinced this by his deep interest in all that concerned them; his gentle, tender nature towards them, and his ever active efforts to advance their welfare and happiness.

His death was sudden, but so tranquil and resigned, as to give a reasonable hope to his friends, that he had made his peace with his God. He was sick but an hour or two. When suddenly and violently seized, his mother rushed to his bedside, and enquired what she should do for him. "Nothing," he answered, "Nothing. I am in the hands of a merciful God, whom I have feared and loved—He has called me, and I must go." And in a short time, before the services of a physician could be obtained, he expired. Thus he died, and may it have been so ordered that he had quenched the darts of the wicked one, on the shield of Faith.

## ARTICLE II.

*Two Cases of Typhoid Fever.* By WM. H. PHILPOT, M. D.,  
of Redbone, Ga.

Upon reading "The extracts from the Records of the Atlanta Medical Society," reported in your Journal (Dec. No.), I find a discussion upon the question, "Can we have Typhoid Fever with Intermittent Symptoms?"

It is, as remarked, a question of considerable importance; for, if we can determine in the outset, our case to be one of Typhoid Fever, it will certainly be of great assistance and utility in preventing and overcoming many difficulties in the treatment and favorable progress of the case. If, in every instance, the physician could, by a touch of the medulla oblongata, become satisfied he was to contend with this troublesome affection, it would be an event greatly to be desired, and of invaluable consequence to the practitioner. The pathognomonic symptom of my friend and preceptor, Prof. J. G. Westmoreland, I know, may exist—I have seen it exist, while by his side—I have examined cases when a student, and since then, but yet, I am certain I have seen cases of Typhoid Fever, and attended them, in which this tenderness in the region of the medulla oblongata was not present.

It is difficult to determine (at least I find it so), when calling to see a patient, the case to be one of Typhoid Fever, when we have presented as symptoms, strictly speaking, those of intermittent or remittent fevers. It is of importance to our patient, for us to distinguish, in the commencement, this first affection, from those of the two latter; for, in my experience, quinine is of no advantage in the treatment of this obscure disease, and much less so is mercury, for the increased nervous prostration, and irritability of the bowels, which they produce, will be the great objection to their use. The importance of distinguishing, in the outset, our case to be Typhoid Fever, has recently been indelibly impressed upon my mind, from treating two cases in which the symptoms were such as led to the treatment of remittent and intermittent fevers, until unmistakable symptoms made their appearance. I give you the cases:

I was called, Nov. 23d, 1856, to the plantation of Major

Daniel, to see a negro woman, Lucy, some 30 years of age, who, the overseer informed me, had been sick some two or three days. Complained first, he said, of headache, and pains in her back and limbs; had had no operation for several days. He gave her, he informed me, "a dose of pills, warranted to cure fevers, liver complaint," &c., &c., but on the morrow found Lucy worse. The pills not operating, he repeated the dose, but she continued no better, and he sent for me.

I found Lucy with hot and dry skin; rapid and full pulse; tongue white, and furred; severe headache; some tenderness in epigastrium, and tenderness in lumbar spine; bowels costive; this was Sunday. On Friday, had high fever, she said, and very little on Saturday; every other day she was a great deal worse. Prescribed,

Hyd. Chlo. Nit.

Pul. Rheii. aa gr. x.

Pul. Ipecac, gr. iij.—Mix,

to be taken at once; and

Rx—Sulp. Quinine, gr. xx.

Pulvis Doveri, gr. xvij.

Make three powders—give one every four hours, commencing as soon as her fever abates.

24th.—Lucy is better—says it is her well day. Bowels moved once; commenced the quinine at 8 o'clock, A. M., yesterday, and took the last dose at sun-up this morning. No fever, she said, since some time between midnight and day, until then. 11 o'clock.—Her fever is returning; pulse full and strong, and 90 beats; nausea, and vomits a little; tenderness in the lumbar vertebræ, and in epigastrium. No tenderness in the region of the medulla oblongata, or in the right iliac region. Prescribed,

Sulp. Quinine, gr. xv.

Pul. Doveri, gr. xij.

Make three powders—one every three hours, commencing at 12, to-night, and to take, at once, a cathartic of hyd. chlo. mit. rhei. and ipecac.

25th.—Returned early this morning, to see my patient, and found her skin moist; pulse soft, and less frequent, being 70 beats to the minute; bowels moved once, occasioned by the medicine; no tenderness in epigastrium, iliac region, or

of the medulla oblongata, but much less so in lumbar spine. Failing to cut short the disease, the paroxysms continuing to return, I determined to give the next dose of quinine myself, Prescribed,

Sulp. Quinine, gr. xx.

Pul. Doveri., gr. xvij.

Make three powders—one every three hours, commencing at 9 o'clock. After giving her one powder, left to attend to some other cases, and returned at 2 o'clock, on my way back to my office. Lucy's pulse was more full and strong; skin warm and dry; had taken the second powder at twelve; complained of some headache, and thought her fever was rising. I remained until 4 o'clock—prescribed,  $\frac{1}{4}$  gr. of morphia to be taken at bedtime, and left Lucy with hot, dry skin; pulse 105 beats, and, on pressure, complained of some pain in the right iliac region; tongue not furred, with red edges, and no tenderness in the region of the medulla oblongata.

26th.—Lucy rested well last night after taking the morphia; complains of severe pain in right iliac region; pulse soft, feeble and frequent, 97 beats; skin slightly moist, and has great inclination to go to stool.

Prescribed morphia  $\frac{1}{4}$  gr., in table spoon brandy; left powder of morphia for bed time, and directed the brandy to be given every 5 or 6 hours.

27th.—Lucy is very feeble; pain in the iliac region is very great; pulse very feeble, and beats 107 to the minute; some tenderness in lumbar spine; none in medulla oblongata. Prescribed blister over iliac region, and continued the brandy; morphia power at night, and one in the meantime, if she is restless.

Thus was Lucy from day to day, with now and then some little diarrhœa, until December 15, when she commenced convalescing, and was discharged on the 17th.

The other case, Mrs. J——, of this county, who I was called to see on the 15th December, is an old lady, but has had excellent health; had no physician, she said, for quite a number of years before. She had been troubled for some days with some little cold and cough; slight headache and bowel complaint; had been to Major Daniels' plantation to see me for medicine, (his overseer's wife is her daughter,) but failed

to see me, as I had left each time she came. She saw Lucy, and gave her several doses of medicine, while those who generally gave it were engaged. She continued to feel gradually worse, and at last took her bed and sent for me.

I found the old lady with hot and dry skin; pulse strong and full; thought she had a chill in the morning about 10 or 11 o'clock, and had had one every day for 3 days; tenderness in lumbar spine, and some pain in right side of abdomen; says the whole side pains her; no tenderness in the region of the medulla oblongata. Prescribed 3 powders of quinine and morphia, to be taken, one at day light, and one every 3 hours.

16th.—Found Mrs. J—— with high fever; great pain in the head; was sure she had a chill about 12 o'clock, although she did not shake. The pain in right side of abdomen is not so great; bowels not moved for two days; tenderness in lumbar and dorsal spine; none in medulla oblongata; always feels very well when her fever passes off. Prescribed 4 powders quinine and morphia, 6 gr. of the former and  $\frac{1}{2}$  gr. latter; one to be taken at midnight, one at day light, and then one every 3 hours.

17th.—Mrs. J. thinks she had another chill about dinner time; at 4 o'clock her fever was high; skin dry and hot; tongue very dry and white furred. I discovered, on pressure, some pain in right iliac region, and says if *I bear hard*, her neck hurts her. Prescribed  $\frac{1}{2}$  gr. morphia, and left a powder to be taken at night if she was restless.

18th.—Rested well last night, and feels better; if no chill to-day, says she will be up very soon; some tenderness in medulla oblongata, and in right iliac region; also tenderness of lumbar spine; has had two operations this morning mixed with blood; complains of being a little cold; gave her a tablespoon of brandy, and as it was near her chill time, waited to see if it would come on about one o'clock. She was certainly attacked with symptoms of a chill, which lasted some hour or more, when her pulse rapidly increased in number and some little in fullness, and her bowels were moved again. She having another bloody operation, prescribed—

Tinct. Catechu, ʒi.

Gum Mucilage, ʒi.

Sulphate Morphia, gr. iij.

Mix—give a teaspoonfull, and repeat in a hour if another discharge; and after the next operation, brandy every 5 or 6 hours, and morphia powder during the night, if she should be restless.

19th.—Mrs. J. is not so well as yesterday; skin moist and pleasant; pulse some 80 beats; the pain in iliac region is quite severe, as also the pains in her head. She is restless, and talks in her sleep; is forgetful, and inclined to be delirious; had one operation during the night. Prescribed—

Aqua Camphor, 3ss.

Morphia, gr. ss.

Mix—continue the brandy; and if another operation, give the catechu mixture.

Mrs. J. continued thus from day to day, sometimes with diarrhoea and delirium, until January 12th, when she became convalescent; and on the 16th was discharged.

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### ARTICLE III.

*Excerpts from the Case-Book of T. S. POWELL, M. D., Sparta, Georgia.*

CASE 1.—*Protracted Constipation.*—On the 10th June, 1855, I was desired by Mr. P. to see his wife as soon as possible—I saw Mrs. P. in about 15 minutes; found her sitting on the bed-chamber, in a state of suffering difficult to describe—she was screaming loud enough to be heard from any part of the house; pulse scarcely to be felt, and body covered with a clammy sweat.

Under these circumstances, I dissolved gr. iss. ext. belladonna, in 3i. warm water, and with a P P syringe, injected one-half; an hour afterwards, the second half was injected, which was soon followed by copious evacuations from the bowels, pulse rose, pain ceased, and in a few hours Mrs. P. felt quite restored. Ordered gr. ii. blue mass to be taken every night for a week.

CASE 2.—On the evening of the 22d of Sept., 1855, I was

called to Mr. J. B., an elderly gentleman, 65 years of age. He complained of excruciating pain in the abdomen, with some nausea, which I attributed to hardened fecal matter in the bowels, as he informed me that he had not had an evacuation in 10 or 12 days. He had taken several doses of castor oil in the last two days, which was rejected. The pains came on periodically—pulse 95, full and sharp—prescribed calomel, gr. x, dov. powd., gr. v; hot fomentation to the abdomen. I called again in a few hours; the medicine had been retained, but had no effect—complains of great pain in the bowels, ever and anon. Prescribed, gr. ii ext. belladonna, sol. in ℥ii warm water, one-half to be injected immediately. Called again in two hours, found Mr. B. quite easy; has had several large evacuations of dark, hardened fecal matter. Ordered gr. ii blue mass every night for a week, and a seidlitz powder for three mornings.

CASE 3.—*Tic Doloureux*.—In the spring of 1853, I was called to see Miss C., a beautiful and robust young lady, about 18 years of age. Found her suffering with all the agonies of this harassing and obstinate affection. Her mother informed me that she had been suffering about twelve hours, and that this was her third attack this spring. Her pulse was 88; tongue coated, with a white fur; bowels torpid; skin slightly yellow showing very clearly that Miss C.'s face-ache was dependent on a derangement of the hepatic function. Prescribed quinia, sulphas, gr. xii. morphia, acetas, gr.  $\frac{1}{2}$ , to be taken at once in water, and the affected parts to be rubbed with the following liniment:

R—Tinct. Opii.  
 “ Belladonna, aa ℥iv.  
 “ Camphorae, ℥i.—Misco.

Next morning, quite easy; ordered pil. hydrargyri, gr. iii, to be taken every other night, for two or three weeks. She was free from pain in an hour after taking quinine and morphine, and has continued from that to the present, without any symptom of *Tic Doloureux*.

CASE 4.—*Hemicrania*.—I was called, in the fall of 1852, to see Mrs. ———, a pale, delicate lady. Found her with a



pulse 120, small and feeble; tongue slightly coated, and suffering intensely with Hemicrania; she had been bled, blistered and cupped, by her family physician, but without relieving the pain. I learned that she was a dyspeptic, and had been from childhood. On examination, I found her bowels and stomach distended with flatus; skin quite natural. I could not hesitate for a moment, as to the nature of the case; and, in consultation with the attending physician, stated, that the quickness of her pulse was dependent on nervous and not vascular excitement; and her dyspepsia was the remote cause; and the great accumulation of gas in the stomach and bowels, the proximate cause of her nervous headache, and suggested that we give her five grs. of asafœtida, to which he very readily assented. In an hour the evolution of gas became quite audible, which was expelled in great quantities at short intervals, from which time the Hemicrania began to subside. Next morning easy; pulse 100. Prescribed,

R.—Iron by Hydrogen, ʒiiss.

Ext. Cinchonæ.

Pulv. Rhei. aa lxxxv.

Hydr. Chlor. Mit. gr. v.

Syrupi, gr. s.

Misce et dividi in pilula, lxxx.

One or two to be taken three times a day, with a wine glass of Porter; the portion to be gradually increased to a pint a day, if she improves, which was done in about a week. In six or eight weeks, I was in the neighborhood, and called to see Mrs. ———, and was pleased to find her in better health than she had been in many years, which she thought; and we believe, entirely due to the stimulating and tonic course of treatment, which is the chief point of interest in the case. An antiphlogistic treatment, as was first adopted by her talented, but young and inexperienced physician, would, I am sure, have aggravated the symptoms, and prostrated the patient. (So much for a correct diagnosis.)

CASE 5.—This was a Factory boy, about 12 years of age. When called, we found him complaining of great pain in his feet and ankles, which were greatly swollen. He was unable to walk. As I was in a very great hurry, I did not examine

the case, but supposed it to be one of rheumatism, and prescribed the following liniment :

R—Tinct. opii.

“ Belladonnæ.

Pulv. Camphoræ.

Aquæ Ammonia.

Olei. Terebinthinæ.

“ Sassafras.

“ Origani, aa ℥ss.

Alcohol, ℥iv.

Misce et signa—Rub the affected parts twice a day, with a woolen cloth, or the palm of the hand

Requested his father to let me hear from him in two days. At the appointed time, his father reported my patient no better, and desired me to see him again. In a few hours, I called and found the boy in the same position, and his feet and ankles, as his father reported, no better. On examination, I found his abdomen swollen, bowels torpid; skin pale, leucophlegmatic; pulse 100; tongue coated and studded, with small pink-colored spots, resembling the top of a pepper castor.” I at once pronounced it a case of worms; I discontinued liniment, and prescribed calomel, gr. x, and the following infusion :

R—Spigelia, ℥i.

Senna, Fol., ℥i

Aq. Bull., Oi.

Fiat infusio signa—A wine glass full to be given every six hours. In 12 hours, he passed 20 or 30 large lumbrici. I saw him no more; but in a few days he was reported able to walk without pain. Prescribed *feri phosph.*, gr. 5, three times per diem for three weeks; *pil. hydrargyri*, gr. 3 ounce a week for the same length of time. My patient is now a hearty, ruddy boy.

The chief point of interest in this case is, that worms in the intestines can produce rheumatic symptoms in the lower extremities, as they do other secondary and sympathetic symptoms—such as dry cough, headache, cold surface, &c. It may also serve to caution the young practitioner against a hasty diagnosis, founded upon a casual examination, and impress his mind with the importance of a careful examination in all

cases, however simple and insignificant things may appear at first sight. If we wish to treat a disease scientifically and successfully, we must know its true pathology.

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#### ARTICLE IV.

*Remarks upon the Medical Properties and Therapeutical Applications of Veratrum Viride.* By V. H. TALIAFERRO, M. D., Atlanta, Georgia.

American Hellebore, or *Veratrum Viride*, anterior to the investigations of Dr. Osgood, was supposed to be analogous, in its therapeutic properties, to that of the European variety.

Dr. Osgood discovered that its effects upon the system were materially different from the white hellebore of the dispensatory, in not producing the drastic effects upon the stomach and bowels, or the alarming prostration so characteristic of the latter variety.

But, instead of this, found it to be wholly destitute of cathartic properties, having no tendency to produce irritation of the lining membranes of the intestinal canal, and reducing the heart's action to as low as 35 beats per minute. In consequence of this difference, Dr. Osgood considered it as possessing very superior advantages over the European hellebore. He does not, however, seem to have fully appreciated its peculiar virtues. The profession were, at least, not inclined to test the remedy to any great extent, at his suggestion. This was owing, no doubt, to the prejudices entertained to the ordinary veratria, the previous history of which, at once condemned its use.

Since that time, the properties of *Veratrum Viride*, or American Hellebore, have, by the minute investigations of Dr. Norwood, of S. C., been more fully brought to light. We believe that he has added an imperishable boon to the profession in thus bringing before them, a remedy of such inestimable properties.

Its power alone, over the vascular system, will ultimately assume, for its deserved position, upon the pages of pharmacy. We say deserved, because we consider it as classing among those great therapeutic agents which must live through the lapse of time.

We propose, first, to notice its most important properties, and the diseases to which it is most applicable. Dr. Norwood gives it not less than eight distinct properties—its most important, being vascular, sedative, nauseant, emetic, diaphoretic, and nerveine.

The first observable effect, after its use, is upon the circulation; reducing the number and force of the pulsations of the heart, thereby, under all circumstances, lessening febrile excitement. If its use now be continued, nausea follows, and finally, vomiting; which is free and easy, accompanied with muscular relaxation, and very great reduction of the heart's action.

The emesis, which follows its use, is invariably unattended with spasmodic action, which so frequently accompanies the use of ordinary emetics. As a nauseant and emetic, then, we see at once, the class of diseases, to which it is best suited; as in croup, bronchitis, laryngitis, asthma, pleurisy, pneumonitis, &c. From the high vascular and nervous excitement, which characterizes this class of diseases, the most prompt and energetic antiphlogistic treatment is requisite. Foremost among these, the lancet has ever been considered the great indispensable—that its substitute is found in *Veratrum*, we shall endeavor to prove.

It is objected to by many, on account of the dangerous and alarming prostration succeeding its use. This seems to be the great cry raised against it. So powerful an agent, too—so poisonous in over-doses—should never be left in the hands of nurses, thereby hazarding the lives of our fellow-creatures. Upon the very same ground, must we not lay aside those old and established remedies, which, for centuries past, have proven to be of such inestimable value in the amelioration of disease? Must we cease the use of such remedies as arsenic, mercury, opium, antimony, &c., because their incautious administrations produces alarming symptoms? The same course of reasoning would preclude the idea of ever giving a remedy; at all, that

would, in over-doses, produce death, unless directly from the physician's hands.

These objections arise mainly, not from experiment or philosophical reasoning, but a natural prejudice existing in the profession, to the use of new remedies.

In regard to its being so prostrating a remedy, we have only to say, that we have never seen any prostrating effect resulting from its use, unless injudiciously administered in large and inordinate doses, which we consider no more lessens its value than the effect of coma, resulting from opium, depreciates its value; or that arsenic is less serviceable because it produces death.

That these remedies are by far more hazardous in large doses than *Veratrum*, we cannot for a moment doubt, because our experience and observation teaches us that *Veratrum* will not, in any single dose, produce death. It is no doubt owing to the fact, that it is so readily expelled from the system; the stomach being unable to retain it sufficiently long to endanger life.

We do not pretend to say that it would not produce death by continued repetition of large doses, thereby exhausting the patient with continued emesis.

\* Dr. Newsome attended two patients, who had each taken a drachm, with the intention of producing abortion, followed by no alarming symptoms, save very great nausea and vomiting. This is an immense dose of a medicine, requiring only from 6 to 10 drops to produce its effect.

A physician of this city swallowed an ounce through mistake, at one draught, attended only with extreme nausea and vomiting, and some difficulty in breathing.

It seems to have no tendency in inordinate quantities, to inflame the stomach as most emetics.

Its most remarkable virtue is its influence over the heart's action, making it a most appropriate remedy in the treatment of a variety of diseases; and also, one of the most prompt and efficient antiphlogistics in use.

It is superior to antimony as an antiphlogistic, from the fact, that it is wholly free from drastic properties.

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\* Dr. Newsome, of Reynolds, Georgia, Nashville Journal, January, 1857.

It is superior to ipecacuanha and other emetics, because of its influence over the circulation which is obtained without nausea.

It is superior to the use of the lancet, because its effects are more decided, and the "vital fluid" is retained, carrying on its important office of conveying nutrient material to the various tissues, which is an important consideration in protracted cases of disease.

We contend that it is not only unnecessary, but injudicious to abstract blood, whether or not inflammatory action exists, when the same effect may be produced by the administration of remedial agents. That this is effected in the use of *Veratrum Viride*, no one who has ever fully and fairly tested its virtues, will deny.

The great advantage it possesses over the abstraction of blood, is that its effects are far more decided, and not followed by the reaction which almost invariably succeeds venesection. Not only this, but the effects of the remedy may be continued for days, and even weeks, successively, without unpleasant sequences, whereas, a frequent repetition of blood-letting would, in most cases, be injurious.

Physicians, generally, are not disposed to lay aside remedies to which, by long continued use, they have become attached; remedies with which they have for years battled with disease, to experiment upon the properties of new remedies.

While we condemn the idea of experimenting with the hordes of quack remedies which infest the land, we do believe that it is the duty of the profession, when a remedy is brought before them by respectable and scientific physicians, claiming for it important medical properties, such as is claimed for *Veratrum*, that its therapeutic properties should be fully and satisfactorily tested by the profession before it be condemned.

A remedy coming to us with the recommendation of such men as Watson, Frost, Osgood, Norwood, &c., is sufficient to elicit from the profession, the deepest interest in its investigation.

No pharmaceutical preparation claims the same power over the circulatory system. *Digitalis*, it is true, has its power over the heart's action, but the uncertainty and inefficiency of that action is obvious to every physician familiar with its effects.

Unlike *Digitalis*, the use of *Veratrum* is sure to be followed by premonitory symptoms, as nausea, &c., previous to a very great reduction of the circulation. Our experience with it, teaches us that it will not, under any circumstances, reduce the heart's action to less than thirty-five beats per minute.

To say then, that we have a remedy by which we can so successfully control the heart's action, as to confine it to any number of beats desired, is assuming for it, virtues unprecedented in the history of medicines. That it possesses such power over the vascular system, will not be doubted by those acquainted with its effects. If, in *Veratrum*, such virtues reside, we at once perceive the class of diseases to which it is peculiarly applicable, viz: Inflammatory affections. We would not, however, confine its field of action alone to this class of diseases; for it is an important adjuvant in the treatment of all affections connected with excessive vascular action. With *Veratrum*, we may confidently lay aside the lancet, and successfully treat the most active inflammations, which we consider preferable, in many respects, to the abstraction of large quantities of blood.

It is certainly of no little importance in all cases of disease, especially those which are protracted, where, from the small amount of nourishment taken into the system, the blood becomes deprived of its source of nutrient material, from which alone the various emunctories can be supplied, that we quiet, if possible, the excited state of the circulation without reduction of its quantity.

It is the only agent in the whole *materia medica*, by which we are enabled, without serious consequences to our patient, to quell the tempestuous beatings of the heart; the only remedy by which we can successfully check the constant supply of fuel to inflammatory action.

If these are its virtues, who will, for a moment, doubt its efficacy in the treatment of diseases, connected with abnormal action of the circulation, whether that action be primary or secondary.

In the treatment of pneumonia, it is unquestionably the most reliable agent we have. When the tissue of the lung becomes inflamed, febrile excitement running high, the breathing short and quick, the proper use of *veratrum*, soon quiets

the excited action of the heart, and the blood is sent smoothly and gently along its channels. When this is accomplished, we cannot fear that rapid increase of inflammation in the lung tissue, so much dreaded in pneumonitis. The free use of *Veratrum* in the outset of the disease, will very frequently, at once, cut short its progress. Yet, while we place our principal reliance upon it, in the treatment of pneumonia, we believe that important adjuvants are found in the use of opium, aconite and calomel.

In this connection, we will make allusion to a case very recently treated by us with *Veratrum*.

A gentleman of this city, having been severely attacked with a chill, followed by high fever, requested that we should immediately see him. We found him some few hours after his chill, with very high febrile excitement; skin burning hot; pain in the limbs; severe headache, with injected conjunctiva.

The pulse was beating over one hundred; very full and bounding—a fine pulse, indeed, for the use of the lancet—disposition to cough almost incessantly, attended with some little expectoration, and severe pain in the right side; auscultation revealed inflammatory action in the lower portion of the lobe of the right lung. We at once administered to him 10 drops of *Veratrum*, to be followed in three hours, by six, and in three hours more, if not nauseated, by five drops more; after which, we saw him in the following condition: pulse beating about 70; skin pleasant and moist; pain not so intense; free from nausea. We now gave him six grains of calomel, combined with ten grains of pul. doveri., that he might rest well through the night.

The *Veratrum* was continued through the night, in four drop doses. The ensuing morning, we found him with no fever; pulse beating naturally; and expectoration free and easy; free from pain except when coughing; auscultation revealed an evident subsidence in the inflammatory action of the lung. It is unnecessary to trace farther the change from day to day; suffice it to say, that the *Veratrum* was continued with no other medicine, save a dover powder at night, with a rapid subsidence of all diseased action, so much so, that upon the fourth day of his attack, he was able to walk upon the street; his medicine, in the meantime, being continued. This patient was never the least nauseated.



Although we believe that Dr. Norwood makes *Veratrum*, in some degree, a "hobby," we cannot think him absurd in saying that "*Veratrum* is as much a specific in pneumonitis as quinine in intermittent fever."

*Veratrum*, it is true, requires, frequently, the assistance of other remedial agents before its effects upon the system are permanent; and thus it is with mercury, antimony, quinine, &c.

We will now casually notice its effects in the treatment of typhoid fever—a disease in which most physicians condemn its use; even those who use it freely in inflammatory diseases.

The pathology of typhoid fever is, that it is non-inflammatory or asthenic in its character, while inflammatory action, in the course of the disease, may supervene. Very great muscular and nervous debility are expected soon to succeed its onset; and it is from this fact, that *Veratrum* is condemned, supposing it to produce the very thing so important to be avoided. This supposed effect of *Veratrum* arises from a mistaken idea of its therapeutic properties. It is free from any prostrating effect in ordinary doses; but, like other emetics, produces more or less prostration when vomiting occurs. We believe its sequelæ to the system, to be more pleasant than is usually attendant upon the use of emetics. An important diagnostic symptom of typhoid fever is its peculiar pulse, small, feeble and frequent, running frequently to as high as 140 beats per minute. We consider, then, that there is not a more important indication to be fulfilled in its treatment, than to control the high vascular excitement attending the disease. If this be done, we certainly lessen, very much, the probability of an unfavorable issue. *Veratrum* is not only serviceable in the commencement of typhoid fever, but is an important agent in the treatment of its latter stages, reducing, frequently, the feeble-fluttering pulsation of the heart from 140 to 70 or 80, thereby changing an abnormal to a normal circulation. It is not reasonable that we should expect, from this change, very great prostration of our patient.

By holding the heart in abeyance, the great organ of the vascular system, we certainly hold an influence over diseased action, in which that organ becomes unduly excited, which no other remedy or combination of remedies gives us. We would not wish to leave the impression, as recommending *Ve-*

ratrum alone in the treatment of typhoid fever. We know that circumstances connected with the patient thus affected, frequently call for the use of other agents.

In the treatment of puerperal fever, we would expect more favorable results from Veratrum than any other remedy; for, how can inflammation advance with the circulation kept far below the natural standard, surface pale and cool, and the blood flowing smoothly and tranquilly along all its channels?

Is Veratrum abortive? This question seems of late, to have produced some controversy in the profession, in which we think it has been very satisfactorily proven to possess no power over the uterine organs. We would rather expect from its relaxing effect upon the muscular system, in large doses, to prevent or retard uterine contractions. From our opinion of the therapeutic properties of Veratrum, we have never hesitated to use it in cases connected with pregnancy. This we have frequently done; and save one case, have never known its use followed by premature labor. That was in case of a lady seven months advanced in pregnancy, who suffered severe and protracted illness from typhoid fever. She used Veratrum for the first week of her attack, after which it was discontinued. In the latter stages of her disease, she was delivered of a living seven months foetus, and recovered after protracted confinement. In this case, fully two weeks had elapsed, after Veratrum was taken, before delivery.

Emetics given to the extent of violent nausea and vomiting, from the spasmodic action of the abdominal muscles, may produce abortion, having at the same time no direct effect upon the uterus. Veratrum, under predisposing circumstances to abortion, administered to the extent of violent emesis, might, from mechanical action of the abdominal muscles, excite the uterus to action. While we have never witnessed such a result, we are inclined to consider such an one not improbable. In the treatment of diseases connected with pregnancy, we would use Veratrum with the same caution we would other emetics in carrying it to the effect of emesis.

At some future time, we propose to continue these remarks with report of cases.

## SELECTIONS.

*A Monograph on Ovarian Tumors; with an extended view of Ovariectomy as a means of cure.* By T. M. TWEED, M. D., of Eckmansville, Ohio.

There are, perhaps, no organs in the human body in which *cysts* containing fluid are so frequently found developed as in the appendages of the uterus, and particularly in the Ovaria. These sacs or cysts, which have not unfrequently been confounded with hydatids, constitute the disease termed *Ovarian* or *Encysted Dropsy*; and it scarcely admits of a doubt, from the progressive enlargement observed in the Graafian vesicles, that these cysts often originate in a morbid distension of these bodies. In other cases, Ovarian Dropsy arises from the development of a solitary serous cyst in the neighborhood of the uterus, in the folds of the broad ligament, or connected with the Ovaria, if not imbedded in their substance. The whole substance of the Ovary is converted into a large bag containing a fluid, or into a congeries of cysts of different sizes, which have no communication with each other.

These cysts, which differ considerably in the density of their coats, contain fluids which vary in color and consistence. In some it is serous, mixed with a slimy, ropy fluid, like jelly; in others it is a purulent fluid, or dark colored like coffee grounds; in some rare instances the contained matter resembles custard or soft cheese; in others a thick dark brown fluid like treacle is observed.

Cysts containing a fatty, or sebaceous matter, intermingled with hair and teeth and bones, have been frequently met with, either in the substance of one of the Ovaria, or adhering to them by a narrow neck. These hairs differ greatly in length and color; some are only a few lines in length, some several inches, while others have been seen which measured two feet three inches. Dr. Sinnet, of Ohio, reported a case to a Committee on Ovarian Diseases of the State Medical Society, in which he opened an Ovarian cyst, finding hair eighteen inches long resembling that of the lady, and, also, in the same cyst he found five teeth in a portion of bone resembling the superior maxillary.

In almost all cases where teeth have been found, they have been implanted into the fragments of bony or cartilaginous matter, and have resembled the rudiments of maxillary bones and alveola. Meckle thinks that these accidental teeth are produced like ordinary teeth in capsules filled with a gelatinous fluid.

These serous cysts have been classed under two varieties—the *Unilocular* and *Multilocular*. They do not partake of the nature of cancer, and have no disposition to degenerate into a malignant form. Yet the Ovaria are occasionally the seat of malignant disease.

Sometimes the Ovary is affected with encephaloid disease, or is converted into a large irregular-shaped mass of cysts and tumors, the section of which presents all the character of *hematoid fungus*. This fatal affection usually runs its course with great rapidity; and soon after its commencement, the constitution of the patient is much more affected than in the organic disease already referred to. These tumors of the Ovary sometimes assume a fibrous texture, or a dense fibro-cartilaginous

structure, and in rare instances contain ossific matter and chalky concretions. Encysted Dropsy, however, is the most common form of ovarian disease. It is one which has baffled the skill of the most scientific, and given rise to an operation the propriety of which has been much discussed of late, and upon which the most eminent surgeons are divided in opinion.

It has been said that this disease attacks females indiscriminately, whether they be married or single. We find, however, in collecting the statistics, that this statement is not correct, and that the married are more liable to it than the single, although the latter are frequently affected. Of 136 cases where this fact is noticed, 88 patients were married, 11 were widows, and only 37 were single—occurring in the proportion of one in 3 25-37, or 37 in 136 cases.

This result agrees with the opinion of Dr. Burns, who says that "the disease is more apt to affect those who have borne children than the unmarried." And it is opposed to that of Dr. Ashwell, who thinks that "single women are, taking a given number, and comparing them with a given number of married females, most liable to the disease.

The *age* at which the disease attacks its victims, varies considerably. There are cases, formerly supposed to be numerous, occurring before the age of twenty; and Dr. Ashwell has known one case which commenced at the early age of fourteen years, contemporaneously with menstruation; but these are rare, for out of 126 cases, only three occurred before twenty. But the most common period for its production, is when all the generative functions are in full activity, and that it is between the ages of twenty and forty years—the prime of life. And it has been ascertained that although many persons afflicted with it, arrive at a good old age, with little or nothing but their bulk to complain of, the *duration* of the disease, in the great majority, is very short. Out of 131 cases, the disease lasted only one year in 38; only two years in 25; 17 patients survived 3 years; 5 six years; 4 seven years; 3 eight years; 1 nine years, 1 ten years; 1 twenty years; 1 twenty-two years; 2 twenty-five years; and 1 thirty years. These statistics are of great importance, so far as they show the great and rapid mortality of the disease under treatment, and is an argument favorable to those who advocate the radical treatment of extirpation.

**THE CAUSES.**—The causes which produce this disease, are at present only partially known. Many patients are unaware of any structural disease going on in their system until they are encumbered by its weight; some perceive an uneasiness in the side, but can not trace the disease to any cause, while others attribute it to causes impossible to admit. Of 36 cases, in which causes were assigned by the patients themselves, for the origin of the malady, 24 were connected with the reproductive process, which is certainly a most prolific source; and the fact goes far to establish the proposition already stated, that married women are more liable to the disease than the single. Of these 14 cases, five occurred directly after marriage (which is distinctly stated as a cause by the patients); nine followed parturition, some of which were observed before complete convalescence; in many cases the disease occurred after the birth of the first child, and in one case after the seventh.

After marriage and its effects, the next most frequent cause is the sudden suppression of the catamenia, and seven patients of the 36 traced their malady distinctly to it. Two cases were traced to abortion; three to exposure to cold; two to falls or blows; one to a violent fit of anger;

one to an eruptive disease ; and one (in a single woman) to disappointed love.

The cause supposed by Dr Denman to be the most fertile source of the malady, is the cessation of the menses. This occurred only twice in thirty-seven cases.

From these facts we draw the conclusion—as far as our numbers can be relied upon—that the production of this disease is referable in most cases to the effects of labor ; that the sudden suppression of the menses is a cause next in frequency ; that the excitement of marriage is next in order ; and I believe disappointed affection is one of the most fertile causes in those that are unmarried.

In the majority of cases, at the commencement, the mensual process is regular as in health ; but the time becomes irregular and the discharge scanty towards the close. In some cases, even where the tumor has attained an enormous size, and is obstructing the other vital functions, menstruation is unaffected.

Pregnancy has often taken place, after the formation of this disease, and parturition has been concluded without interfering with it. One case of this kind is related by Dr. Ashwell, whose advice was sought by the parents of a young girl who had ovarian disease for two years, about the propriety of marriage. He endeavored to dissuade her from her purpose, but, not taking his advice, she married and had several children without the disease producing any inconvenience. There are many cases recorded of married women having borne children after the full establishment of the disease ; and in some instances, one, two and even three children were born after the tumor was of considerable size. One of the most remarkable instances of this character came under my own observation. The lady was the mother of five children, three of whom were born after the tumor had reached an enormous size.

A number of cases are reported, and well authenticated, where the patients have undergone ovariectomy, and one of the ovaria been extirpated, and yet they have subsequently enjoyed good health and borne healthy children. Some years ago, Dr. Buckner removed the right ovary involved in a tumor of twenty pounds weight, and the woman was subsequently delivered of a healthy child. In such instances, the mensual process and the power of reproduction are carried on by the healthy ovary ; but when both are diseased these functions cease.

Dr. Frederick Bird, of London, reports a case in which he asserts that he extirpated both ovaria, and that menstruation was subsequently continued. This is certainly a mistake or an error in diagnosis. Otherwise, it unsettles all the teachings of our best physiologists on the subject, and we must look to some other organ than the ovaria for an explanation of the physiological changes in the uterine system, which produce the catamenial eruption. It is most probable that he removed a tumor from each side, which had its origin in the broad ligaments, but did not involve the ovaria.

The growth of an ovarian tumor is sometimes very slow, giving little inconvenience, and only becoming annoying by its bulk. It seems to proceed, for a time, independently of the general system, producing its work of destruction gradually, until at last it overwhelms its victim with alarming rapidity. I have seen a small ovarian cyst, lying dormant for a considerable time so as to throw a doubt upon the diagnosis, progress so

rapidly in a few weeks, as to acquire a large size ; obstruct breathing, and severely impede the vital functions.

Many patients have lived beyond the fiftieth year of their age ; but this is rarely the case, the majority of patients, and especially where the disease is active, being carried off in a few weeks, months, or years. The usual duration of the disease is from one to two years, although 26 cases of 131 existed ten years, and one continued to exist even thirty years.

It has been stated, and upon reliable authority, that the left ovary is most liable to affection. Mr. B. Cooper holds this opinion. He says : "Of fifty cases, I find eight had some malignant disease in some other part of the body ; and that in thirteen, both ovaria were affected, and that the *left* ovary was more frequently diseased than the *right*." This result does not correspond with the one obtained from Dr. Thomas Safford Lee's table ; for we there find, that out of 93 patients where this point was noticed (they being taken indiscriminately from the journals), the disease involved the *right* ovary in fifty cases, and the *left* in thirty-five ; while in eight of the cases, both ovaries were diseased.

In a very elaborate report on ovariectomy, read before the Ohio State Medical Society, in 1851, by the late Dr. Philip J. Buckner, more than two hundred and fifty cases are recorded, and of the instances in which the ovary affected is mentioned, the *left* was diseased in the proportion of one to three cases.

THE PATHOLOGY OF OVARIAN DROPSY.—In considering the pathological anatomy of cystic dropsy, there are many circumstances, even at the present time, for which we shall be unable to account. The precise anatomical relations of these tumors are not clearly defined. It will be sufficient, however, to mention the more evident and prominent facts, that they may be guides in practice, and leave the disputed points to those who are more capable of entering into the discussion.

The observations, which will include the necessary practical information in relation to this disease, may be confined to three prominent particulars :

- I. The various structures of cystic tumors of the abdomen.
- II. Their contents.
- III. Their effects they produce on the different organs contained within the abdomen.

I. The first of these divisions will contain a description of,

1. The simple cyst attached to the ovary, or broad ligaments of the uterus.
2. Enlargement of the Graafian vesicles.
3. Cysts unconnected with the ovary, found in various parts of the abdomen, and usually mistaken for ovarian dropsy.
4. Multilocular cysts.

To each of these anatomical characteristics, the attention of the reader will be briefly directed :

1. The simple cyst, which originates in the ovaries or the broad ligaments, is generally divided into two varieties, although they both possess very similar characters. The one is attached by a distinct and long pedicle, and the other is sessile. The walls are always thin, and semi-transparent, containing within their cavity a clear fluid. The peduncular variety appears to be stationary, seldom giving rise to much inconvenience ; while that which arises in the broad ligaments of the uterus may become

so large as to fill the cavity of the abdomen, and present all the symptoms of ovarian dropsy, from which it can hardly be distinguished.

2. The enlargement of the Graafian vesicles is a very frequent source of cystic dropsy. We are enabled to trace this increase of size from the slight enlargement which accompanies a congestion of the ovary, to a much more considerable one, where it is evidently the seat of graver disease. And I think we are warranted in the conclusion, that many of the large ovarian tumors, where the ovary is lost, or occupies so small a portion of the sac as to be undistinguished, can be traced to the enlargement of these vesicles.

If the ovary of a woman in the prime of life be cut open and examined, there will be found under its proper covering a number of vesicles, which vary in size from a pin-head to that of a pea; there may be one largely developed, or several of a much smaller size. These, then, when they take on morbid action, may increase so much as to destroy those most contiguous to them; or one may assume a more rapid growth, and cause by its pressure the absorption of the tissue of the ovary, and thus convert it into a cyst. From this view, it is evident that ovarian dropsy very frequently arises from disease of the vesicles of Dr. Graaf, and the more its morbid anatomy is studied, the greater confirmation will this opinion receive. An additional fact, which goes far to establish this proposition, is, that the origin of ovarian dropsy, so far as it is ascertained, principally depends upon the sexual orgasm, which chiefly affects the ovaria.

3. Cysts are not unfrequently developed in other parts of the abdomen, unconnected with the uterus and its appendages, producing the same or similar symptoms, requiring the same treatment, and undergoing the same changes, as those which have their origin in the ovaries. This is illustrated by a case which occurred under the care of Dr. A. T. Thompson, of University College Hospital. It partook of all the symptoms of ovarian dropsy: the patient was tapped forty-eight times, from which operation 177 gallons of fluid were discharged. The swelling commenced in the form of a tumor in the lower part of the abdomen toward the right side, which gradually extended to the left, and increased to such an extent as to interfere with digestion and respiration. On examination, after death, the tumor was found to have arisen in the *omentum*, close by the pancreas, and was attached by a long, thin portion to the uterus, but it was entirely unconnected with the ovaries.

A very remarkable case of this kind is given by Dr. T. S. Lee. Mrs. —, 50 years of age, married, had been laboring under a tumor of the abdomen for twenty-five years. She had had one child previous to its appearance, and three children since; she suffered in nothing from the disease, except its bulk, and up to the last, was able to amuse herself with household duties. The tumor was of enormous size, disturbing the breathing, and at last terminated fatally.

A *sectio cadaveris* revealed the following facts: The cavity of the abdomen was almost entirely filled with an enormous tumor, which pushed up the viscera to the right side, and compressed the spleen posteriorly. It was found to have commenced on the left side, just under the pancreas, but below the *peritoneum*, so that it rested upon the posterior muscular walls of the abdomen. A narrow pedicle, six inches long, of the size of a quill, connected it with the uterus. It had, also, formed connections

with the other viscera of the abdomen. The cyst itself contained two pailsful of turbid, whitish-colored fluid, with an immense number of balls of hair, mixed with fat, and calcareous matter; no hairs were observed attached to the cyst, but the balls of hair, fat, and osseous deposit were as large as the closed hand. On the left side of the cyst, attached to the walls, was a mass of bone and teeth, etc., strongly resembling an imperfect fetus. This body was about four inches long, and covered by a membrane resembling the true skin, but closely connected with the sac. It presented at the upper portion an opening divided into two parts, like imperfect nostrils, immediately under which was a large bone, like the lower jaw, filled with teeth; on each side of this part projected a small appendage resembling the ear; below this mass were two long appendages, like abortive arms; the right one smaller, and composed of skin, at the end of which were a few hairs; the left was larger, still more closely resembling the arm, and apparently jointed at the shoulder and elbow; it contained one strong bone like the humerus, and two small bones for the forearm, but the lower end of these terminated the limb. At the lower extremity of the body of this mass was a large projecting bone, also jointed. This approached the form of a femur, at the lower extremity of which was an irregular deposit of bone.

This case, during life, presented all the appearances of ovarian dropsy. After death, it was found to possess masses of hair, and a body analogous to an imperfect fetus; and yet the cyst was located *beneath the peritoneum*, and consequently entirely detached from the uterine organs.

It has long been supposed that such productions are the result of extra-uterine conceptions; but this, at least, is not universally the case, as the foregoing post-mortem examination clearly demonstrates.

4. *Multilocular Cysts.* The symptoms to which this species of cyst gives rise differ materially from those produced by the varieties we have already noticed. Instead of distinct and clear fluctuation, we find this symptom very obscure, and only distinct in particular positions. This arises from the tumor being divided into a number of separate cavities, with walls sufficiently thick and tense to prevent the fluctuation of one cyst affecting the fluid of another. This is found to be the case even where the sac is removed from the body.

The form of the tumor, where it is multilocular, is irregular, from the projection of secondary and tertiary cysts into its cavity and beyond its walls. Such portions feel fleshy, and when the hand is applied over them, fluctuation is perceived much less distinctly. The growth of these tumors is much more rapid than the other forms, its effects on the constitution greater, and its final results more certainly fatal. From the first appearance of the disease, a deep-seated pain is felt in the groins, and examination reveals a hard tumor, which may be mistaken for a tumor of the uterus or ovary. This may gradually enlarge, or become stationary for a time, but then suddenly increase, until it fills the entire cavity of the abdomen, pressing upon the diaphragm, affecting all the vital functions, producing dyspnoea, vomiting, oedema, and death.

The mode of the formation of these tumors, has been a source of great discussion among pathologists. Some believe that this particular variety is the product of hydatids; others, that it is enlargement of the cellular tissue; while others think that the growth is merely adventitious. This last opinion is advanced by Dr. Hodgkin, and is now generally received



as correct. A glance at his principal arguments will be interesting: (*Hodgkin on Serous Membrane*).

Speaking of the adventitious serous membrane, he says, "that the adventitious serous membranes, like those existing naturally in the body, form complete shut cavities. As far as in our power to ascertain, they are wholly, or at least with very few exceptions, the result of an entire new formation, dependent on some anomaly in the function of nutrition, but with regard to the precise nature of which we are completely in the dark." He goes on to divide serous cysts into two distinct classes; the one, where they are simple, and, for the most part, solitary, and containing only one cavity; the other, where the sac possesses the remarkable property of giving origin to new growths having the same character as itself. The latter is the multilocular form, and will now engage our attention.

"In this form," says Dr. Hodgkin, "we observe on the interior surface of the principal cyst, elevations more or less rounded, and of various sizes, projecting into the interior of the cavity, and covered by a membrane which is continuous with the lining of the principal sac. On making an incision into these tumors, we find that they also consist of cysts of a secondary order, filled by a secretion, often serous, but almost as frequently mucous. It is not, however, merely by these secretions that these cysts are filled; on looking more minutely on the interior of these cysts, there grows a cluster of other or tertiary cysts, upon which is reflected the lining membrane of the cyst in which they are contained. Cysts of a secondary order, not unfrequently afford as complete specimens of a reflected serous membrane, as either the pericardium or tunica vaginalis: the lining membrane of the containing cyst corresponding to the reflected portion, as that covering the contained bunch of cysts, does to the closed portion. The proportion which the contained cysts bear to the cavity of the membrane reflected over them, is extremely various. Sometimes the fluid, especially where it is of a serous character, nearly fills the containing cysts, while the bunch of cysts is of a very inconsiderable size. At other times, the superior cyst is almost filled with those of an inferior order; in which case we may generally find that the nodules, or tuberos elevations, which we may have observed on the exterior of the containing cyst, are occasioned by the unequal development of the contained cysts; for those which have grown most rapidly, and have obtained the largest size, forcibly dilating that portion of the cyst which is reflected over them, produce a kind of hernia of that part. It sometimes happens that the distension, occasioned by the growth of the contained cyst, is sufficient not only to distend the even surface of the containing cyst, but actually to produce a rupture, which admits both of the escape of its fluid contents, and of the uncompressed growth of the secondary or tertiary cysts which took their origin from its surface.

The cysts which I have been describing, as found on the internal surface of the first formed cysts, at times pour out a part of their contents into the interior of the large or parent cyst, either in consequence of an extensive rupture produced by the development of a contained order of cysts, as I have before described, or by small apertures, which likewise appear to be the result of distension. In both these cases, but especially the latter, the open cysts bear a considerable resemblance to mucous follicles on a large scale, and appear to be the principal sources of the very

copious and rapidly-produced secretion which is a characteristic feature in many cases of ovarian dropsy. This mucous bears a very close resemblance to that furnished by the glands of Naboth, and it is frequently so viscid that it passes with difficulty through the canula. The membranes of which these cysts, whether of the secondary or tertiary order, are formed, are liable to inflammation. The product of this inflammation, like that which takes place in the serous membranes, naturally belonging to the body, may be either of the plastic or unorganizable kind. In the former case, it leads to the formation of adhesions between the close portion of the membrane, or that which constitutes the cluster of cysts, and that portion which is reflected over them, forming the varieties of the containing cysts.

When the product of the inflammation is of the unorganizable kind, we find a secretion more or less puriform in its character. This secretion is found sometimes confined to one or more of the secondary cysts; at other times, it finds its way of escape into the interior of the principal cyst, and thus contributes to the variety in the appearance presented by the fluids, drawn off in the operation of paracentesis for the relief of ovarian dropsy. But the puriform secretion may proceed from the abrasion of the principal cyst."

This, then, I conceive, is the most plausible theory of the primary formation of multilocular cysts. But there are other peculiarities which come under our notice, and deserve mention.

*The size* of these tumors varies greatly, from the small pedunculated cyst, to one which will measure four feet, or more, in circumference. No definite extent can be given to them, and the simple and complicated equally attain an enormous size. Their tendency is to increase until arrested by some pressure they can not overcome. Their growth is very rapid usually; the great majority of cases, as before observed, terminating fatally within two years.

*The walls* of these tumors are aponurotic, varying greatly in thickness: some are very thin, while others are thick and fleshy. Externally, they are generally smooth and shining, when undetached; internally, they present a variety of appearance. In some the lining membrane is rough and granular, and often thrown into the folds of different forms, from the diminution of the cyst by tapping or rupture. Sometimes a great portion of the cystic walls is very thick, and has, apparently, an outer and inner layer, with the intervening space filled with small cells; the whole mass, when cut, has the appearance of honeycomb, or a piece of sponge. Some of these cells are distinct, others communicate with those contiguous to them. I have seen the walls of one of these cysts two inches in thickness. Occasionally the cysts on the internal surface of the principal one, are pedunculated, presenting the appearance of a cauliflower, rough, granular, hard, and filled tensely with fluid. These masses may occupy only detached portions of the cyst, or entirely fill its cavity. Fibrous tumors may, also, project from the inner surface; and bony matter is frequently deposited within the walls, either in distinct patches, more or less extensive; or it may be deposited throughout the whole extent of the parietes of the cyst.

Hydatids have been frequently found in ovarian cysts. They are distinct, globular bodies, which support their own life, are unattached, floating in the fluid of the cyst, and appear to be foreign to it.

Ovarian tumors are very freely supplied with blood. Blood-vessels can be seen ramifying over them, and the principal cyst is sometimes so vascular as to cause its internal surface to be quite injected. Large blood-vessels are frequently seen running in all directions, both between the various cysts and externally on the tumor; and when present, add materially to the danger of paracentesis. I have seen vessels as large as the little finger ramifying in all directions over a tumor of this description; and in one case, a large vessel ran below the umbilicus, between the cyst and abdominal walls. Many are the instances which may now be cited, of death from hemorrhage as a consequence of extirpation of these tumors. The pedicle is often so largely and freely supplied with blood-vessels, that no ligature is sufficient to secure it.

The adhesions these bodies form with the neighboring viscera, will be fully considered, when we come to treat of ovariectomy as a means of cure.

II. *The contents of ovarian cysts.* These may be divided into *fluid* and *solid*. Although we have briefly enumerated the varieties, and glanced at their character, it may not be uninteresting to consider them a little more in detail.

In the first class (fluid) we find great varieties. In the simple cyst there is generally to be found a transparent, straw-colored fluid, which is highly albuminous, coagulating on the application of heat or nitric acid. When such fluid is discharged, and entirely empties the tumor, the probability is that the cyst is simple, and the disease, at that time, benign; but if the tumor be not emptied, we can not draw such a conclusion, for this fluid may be only the contents of one of a multilocular cyst.

The next secretion most common in this disease, is that of a thick, glary, gelatinous semi-fluid, varying in consistence from that of a thick cream to almost solid matter. Frequently a fluid-like coffee is discharged. Under the microscope, it is found to contain blood corpuscles, in their perfect state, some with their capsule destroyed, and also small detached pieces of capsule without a definite form.

A light brown fluid may be drawn off, and towards the close of the operation, distinct white masses present themselves of various forms, preventing the exit of the remaining fluid by closing the canula. A fluid of this kind was found to be of specific gravity 1.025, and it became nearly solid on the application of heat or nitric acid; but it did not coagulate spontaneously. The solid matter under the microscope appeared to consist of granules, and the mass appeared to be fibrous. There were, also, similar globules contained in the fluid, with numerous blood-disks. Pus is often effused into these sacs after an inflammatory attack, and large quantities are discharged. Sometimes we meet with a fluid of an olive green color, containing a number of shining crystals: these are found by the microscope to be cholesterine.

Dr. Rees has given an analysis of five specimens of fluid taken from ovarian dropsies, and has compared them with the constitution of the blood, and finds in them an excess of water and extractives, but a deficiency of albumen. He says "it will be seen by comparing these analyses with that of the serum of the blood, that in every specimen there is a considerable excess of water and extractives, and a deficiency of albumen. As all these fluids were of that mucoid tenacious character, so well known to those who are in the habit of examining the cyst of ovarian dropsy, I am inclined to conclude that this peculiarity of appearance is

attributable to the presence of a large portion of extractives, particularly the albumen combined with soda, which opinion is confirmed by the experiments of Dr. Babington, who has succeeded in forming a mucoid fluid by the addition of alkalies to albuminous fluids or secretions.' In the preparation the salts are in excess in proportion to the albumen.

"My reason," says Dr. Rees, "for regarding the salts in relation to the solid matter, is, that the peculiar mucous character of the liquors is owing to the nature of the solid ingredient, and quite independent of any peculiar portion of water, as might at first be supposed. Again, the alkaline salts obtained from the ovarian fluids, differ from those of the blood in not containing any phosphate which can be recognized, even as a trace, in the quantity of solid matter obtained from two hundred grains; experiments made on large quantities for the express purpose of detecting an alkaloid phosphate, showed a trace only.

From these experiments, then, we find that the fluids taken from ovarian cysts, when compared with the blood, contain *less* albumen than that fluid, although *more* than it, in combination with soda; and the peculiar mucoid character of such fluids depends upon an excess of extractives, particularly albumen combined with soda.

All the varieties of fluid may be contained in one ovarian tumor, as is often demonstrated by paracentesis. At first a pale yellow fluid may be evacuated, followed by a black and tenacious one, succeeded again by pus.

This depends upon the bursting of secondary and tertiary cysts into the principal one, or inflammatory action resulting in ulceration. After death we frequently find these various productions contained in neighboring cysts. Mr. Howard, in the Medical Gazette, 1852, describes a tumor of this sort, he says: "The tumor was composed of an immense number of cysts of all sizes; their contents were very various—in some, the matter was colorless serum, in others it was yellow, in others as dark as coffee, and in others it was bloody. The consistence of these fluids was as various as their color."

We shall next give a brief description of the *solid substances* contained in ovarian tumors. Fat, hair, bone and teeth, as we are already informed, are the solid substances most usually met with. Formerly these productions were always attributed to *conception*, but subsequent observations have distinctly proved that the generative faculties have nothing to do with their formation. And the facts produced in proof of this statement arise, 1st, From the knowledge that these productions have been observed in virgins, and those too young for copulation. 2d, They have been discovered in other parts of the body, unconnected with the uterus or its appendages. And 3d, they have been found in the male sex.—*Vide. Baillie's Morbid Anatomy.*

1. Dr. Baillie has furnished us proof of the first fact, and has related a case where fat and hair were found in the ovaria of a little girl thirteen years of age. A little girl about thirteen years old was brought into the dissecting room, and the blood vessels were injected. The right ovary was swelled to a size larger than a hen's egg. It was filled with a peculiar sort of fat and hair; at one place there were two long excrescences from the capsule containing this fat, which a good deal resembled teeth. The uterus was as small as at birth, and when opened, exhibited the common appearances. The girl had an entire hymen and the pubis was without hair. Such cases have been considered as impregnations, but in this case,

the state of the uterus, the age and the hymen rendered such a supposition groundless.

2. These substances are found in tumors altogether unconnected with the generative organs. We have already referred to a case where the cyst contained in its walls a body resembling an abortive fœtus, which was entirely unconnected with the ovaries, and was situated *under the peritoneum*, and lying on the muscular tissue of the posterior walls of the abdomen. In that case there were two large portions of bone, regularly set with teeth, corresponding to and representing two portions of the lower jaw, and other large bones were seen. The cyst which contained these bodies, and from which they grew, was of enormous size, and contained large quantities of fat mixed with hair. The disease was of twenty-five years standing. The uterus and ovaries were healthy and unconnected with the tumor.

Tumors containing these substances are frequently found in other cavities besides the abdomen. Dr. Gordon, of the London Hospital, has met with a tumor in the anterior mediastinum, containing an osseous structure resembling a portion of the superior maxillary bone, some hair and teeth. And Sir B. Brodie has found some well formed teeth in the bladder.

3. These formations have, also, been found in animals, and in the male sex. Professor Coleman has described a tumor found in the abdomen of a gelding, in which two molar teeth of the horse, possessing the regular arrangement of bony matter and enamel, were attached; also, an incisor attached to a portion of a bone resembling the jaw, and a quantity of hair and fat in a separate cyst.

Dr. F. H. Ramsbotham, also, states in his lectures that Ruysch possessed a tumor in his collection which consisted of teeth and hair, that had been taken after death from a cyst found in the coats of a man's stomach; besides a jaw with well formed teeth which had been taken from the bladder.

Duvernay saw a tumor extirpated from the scrotum, containing fleshy matter and bones.

Dupuytren related to the Medical Society of Paris the history of a tumor found in the abdomen of a boy, containing a mass of hair, and a fetus nearly ossified.

And in the first volume of the *Med. Chir. Transactions*, page 236, is a description, by Mr. George W. Young, of a fetus distinctly recognized in a cyst, in the abdomen of a boy (John Haré) about a year and a half old.

These cases are quite sufficient to prove that such productions are not the result of the procreative function—that they are not extra-uterine conceptions; but, more probably, that they are either the production of the cyst itself, or of the confusion of two separate ova at the time of impregnation. No doubt the latter supposition may account for some of these anomalous products; but we think sufficient stress has not been laid on the secreting powers of the cyst itself. For instance: we have already seen that it is no uncommon thing for a cyst to secrete bone; we have quoted instances where the sac itself has been converted into bone; and we have seen bone discharged from an ovarian tumor, during life. Besides, hair, also, can be produced by the cyst itself. In the museum of St. Bartholomew's Hospital, there is an ovarian sac, the inner surface of which has taken on a peculiar action, and has produced a membrane

like the scalp, which is covered with hairs, they having a distinct bulb, and growing in the same manner as on the external surface of the body. Dr. Carswell, also, gives a beautiful drawing of an ovarian cyst, from a portion of which grew a considerable number of long hairs; some hairs were detached, and had formed themselves into balls of various sizes. No hairs grew from any other portion of the cyst, and they possessed bulbs. We thus find, that the sac contains the power, not only of producing hair, similar, in every respect, to the natural hair of the body, but of bone itself, which becomes detached like the hair, and is found in variously shaped masses, in the cavity of the cyst.

Dr. Ashwell supposes that these products have their origin from disappointed sexual appetite; the power of production being present in the female, but the ovum not receiving the vivifying stimulus of the male semen, an imperfect development is the result. But if we, for one moment, consider the foregoing cases, and reflect that they are found in all parts of the body, and in parts entirely unconnected with the generative system, and even in the male sex, this supposition of Dr. Ashwell must be erroneous.

III. We come now to consider, in the third place, the effects produced on the abdominal viscera by ovarian cysts.

In the early stages, these tumors more particularly affect by pressure the organs contained within the pelvis, causing retention of urine, and constipation; producing, also, various changes in the position of the uterus. At a later stage, the results of pressure are felt in a more serious degree: the stomach is affected; the chest is unable to perform its functions; the kidneys are pressed upon; suppression of urine takes place; and sometimes, by the bursting of the sac, the peritoneum becomes inflamed.

There is great tendency in these tumors to produce ulceration in neighboring organs. The colon, throughout its extent, is subject to its ravages: many cases are recorded to illustrate this fact. The bladder has been perforated by the pressure of these tumors. Dr. O. Heming relates a case, in the translation of M. Boivin's and Duge's work, where "the bladder was opened by ulceration, and for a long time allowed hair to pass with the urine; at last a body was extracted from the bladder, as large as a hen's egg, presenting at one of the extremities a shred of skin containing hairs, and a bone in which was partially fixed a kind of tooth resembling a small molar. The communication of the cyst with the bladder was ascertained by the finger passed into the urethra. The person is said to have recovered."

These tumors, when small, and existing with pregnancy, give great trouble when parturition occurs, and frequently endanger the life of both mother and child.

The late Dr. Buckner, of Cincinnati, whose manuscript notes upon this subject I am permitted to examine, has given the following case: "I witnessed a post-mortem examination of a female in this city, who died suddenly from an obscure disease of the uterus, attended by profuse periodical hemorrhage. The abdomen was considerably enlarged by a solid tumor in the hypogastric region, extending as high as the umbilicus. In the left iliac region was another tumor, soft, and more elastic than the other. The periodic hemorrhage was preceded and accompanied by severe pains, resembling those of labor. During life the lady was attended by several medical gentlemen, of respectable acquirements, and several

others, of great experience, were called in consultation. Yet none were fully able to diagnose the case. It was treated for dysmenorrhea; it was pronounced ovarian disease; some called it polypus of the uterus; while others thought it malignant disease of the uterus, complicated with ovarian dropsy. The *post obit* revealed the existence of ovarian cyst, about the size of a full grown fetus, filled with a transparent fluid. The uterus was enlarged to about the same size. On cutting it open, the walls were found thick and indurated, and a large bloody fungus projected from the inner surface of the fundus, through the *os tincæ*, into the vagina. Extensive adhesions existed to the rectum, bladder, and peritoneum adjacent. In the posterior wall and fundus of the uterus, was found extensive ulceration within the compass of the adhesions with the rectum. This abscess had ruptured, preceding death, and discharged a large quantity of pus into the abdominal cavity; thus inducing death from actual inflammation in the peritoneum and intestines."—*Cincinnati Medical Observer*.

(TO BE CONTINUED.)

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*The Relations of Chemistry to Practical Medicine.\** By ISAAC L. CRAWCOUR, M. D., Professor of Chemistry and Medical Jurisprudence in the New Orleans School of Medicine.

There is an idea prevalent among students of medicine, at the out-set of their career, but of which they become rapidly disabused, during the progress of their practice, that an attendance upon Lectures of Chemistry is a compulsory act, one followed by no practical benefit in the end, involving a loss of time, which might be more advantageously devoted to some more profitable subject. No idea can be more fallacious than this, and it will be my endeavor to show how intimately connected with Chemistry, is every branch of the studies which are essential to the medical student.

Among the various subjects which engage the attention of one who intends to devote himself to the practice of our profession, there are but two which may be considered fundamental, and, to stand upon a basis of their own, and these are Anatomy and Chemistry. Anatomy and Chemistry are positive sciences, depending upon direct experiment for their elucidation, requiring no hypothesis and partaking of the character of an art as well as of a science, since both demand a certain amount of manual dexterity. If we pass in review the other branches of study, to which your attention will be directed during the time you are fitting yourselves for your profession, we shall see how far they are dependent upon these two.

An acquaintance with your weapons of defense against disease, the *Materia Medica*, depends, for its very existence, upon a knowledge of Chemistry. There can be no judicious practice of medicine, no well

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\*This paper contains the substance of the Introductory Lecture, delivered to the class of the New Orleans School of Medicine, November, 1856.

founded system of surgery, without physiology, and a correct physiology cannot exist without a combined knowledge of Chemistry and Anatomy. The practice of mid-wifery, the treatment of the numerous and obscure diseases of women and children, are but other phases of the Institutes of Medicine, and require the same guide. Anatomy and Chemistry are the two pillars which sustain the whole superstructure of the medical sciences.

We will now examine a little in detail, the objects and advantages of Chemistry, not only to the student of medicine but to the practitioner.

To the tyro, as well as to the advanced student, that which appeals most strongly to his mind, that which impresses him most forcibly with wonder, is the utter indestructibility of matter. In Chemistry, nothing is lost; the atom which was in existence at the period of the creation, is performing its destined work at the present day; the fostering mass of corruption, which, to the eye of the vulgar, is destruction and decay—is, to the chemist, but a re-arrangement of atoms, which are living and will live again, to perform their accustomed task in the scheme of the universe. A burning body wastes and disappears, while nothing seems to be produced but warmth and light, which we are not in the habit of considering as substances, and when all have disappeared except, perhaps, some trifling ashes, it is naturally supposed that they are gone, lost, destroyed; but when the question is examined more exactly, we detect in the invisible stream of heated air, which ascends from the gloomy coal, or heated wax, the whole ponderable matter, only united in a new combination with the air and dissolved in it; yet, so far from being thereby destroyed, it has only become again what it was, before it existed in the form of charcoal or wax; an active agent in the business of the world, a main support of animal and vegetable life, and is still susceptible of running again and again the same round, as circumstances may determine; so that the same identical atom may be concealed for thousands of years in a limestone rock; may at length be quarried, set free in the lime kiln, mix with the air, be absorbed by it from plants, and in succession become a part of myriads of living beings, till some new concurrence of events, once more consigns it to a long repose, which, however, in no way unfits it from resuming its former activity. All that age or decay can do, seems to be included in a wasting of parts which are only dissipated, not destroyed, or in a change of sensible properties, which Chemistry demonstrates to arise only from new combinations of the same ingredients. Annihilation is a word unknown to the chemist. Destruction is but a synonyme for regeneration.

Not one of the least commendations of Chemistry to the individual intending to devote himself to the practice of our profession, is the strict and pure system of logic it engenders. In Chemistry mere hypothesis has no existence—every thing must be subjected to experiment—the re-agent and the crucible, the blow pipe and the test, are the weapons of arguments, and from them there is no appeal. The beautiful simplicity of its laws, admitting of no doubt or confusion, the certainty of its results, must enchain the reason of all who become introduced to them.

We find the entire universe composed of a certain number of elements, which elements combine in certain definite proportions to form bodies which we call compound; these compounds again combine according to the same law, and, however complex the body may be, how numerous



soever its constituent particles, still it is marked by the same simplicity and beauty which distinguishes every variety of combination under the influence of chemical force. There is no uncertain arrangement of particles, but, however great the number of atoms of one element may be over those of another, only those combine which are required according to the great natural law of the atomic theory, to form the compound, all the others remaining free and uncombined. Synthesis and analysis, the one resolving a body into its constituents, the other reforming it from these same constituents, correcting and checking each other, are the disciplines with which Chemistry curbs the intellect of its votaries, and no exercise can so strongly teach the necessity of a rigid and accurate system of reasoning—not even geometry itself—as the constant supervision which the chemist must keep over his experiments, and the absolute exactness of the results which they must yield. In Chemistry, one's observations must not only be circumstantial, but faithful, and every thing we observe must be rigidly set down; a strict and accurate habit of observation is thus acquired, and the student soon learns, that in the science to which he devotes his attention, nothing is unimportant, nothing insignificant.

It was a happy thought of Glauber, to examine what every body else threw away, and by this examination of residue, some of the most important chemical elements have been discovered. Thus the Swedish chemist, Arfwedson, discovered Lithia, by observing an excess of weight in the sulphate, produced from a small portion of what he considered as Magnesia, present in the mineral he had just examined, and which he was about to throw away; the metals Selenium, Iridium and Osmium, were discovered in a similar manner. Trifles, apparently the most insignificant, are often productive of the greatest events. In illustration of this, we may exemplify the discoveries of Galvanism and Iodine. The movements of the legs of a frog, recently dissected, lying near a Galvanic Battery, attracted the observation of the Italian physician, the mere accident (if we may use such a term) of the spasmodic motion of these limbs gave to his well-disciplined mind, the first germs of that grand discovery, the results of which, now pervade the entire globe. The decomposition of water, the fusion of the most refractory metals, the relief of paralyzed limbs, the electric light, whose brilliancy almost equals that of the sun, the transmission of a message, from one hemisphere to the other, with the rapidity of thought itself, are all due to the mere observation, by an old man, of the peculiar movements produced in the legs of a decapitated reptile, as it happened to lie upon his dissecting table.

Equally illustrative of the necessity of cultivating habits of observation, equally forcible in proving the paramount importance of not neglecting the merest trifle, is the history of the discovery of Iodine and its application to medicine. A soap boiler of Paris, one Mr. Courtois, remarks "that the residuum of his ley, when exhausted of the alkali for which he employs it, produces a corrosion of his copper-boiler, for which he cannot account. He puts it in the hands of a scientific Chemist for analysis, and the result is the discovery of one of the most singular and important chemical elements, viz: Iodine. The properties of this, being studied, are found to occur most appositely in illustration and support of a variety of new, curious and instructive views then gaining ground in Chemistry, and thus exercise a marked influence over the whole body of the science. Curiosity is excited; the origin of the new substance is traced to the sea

plants, from whose ashes the principal ingredient of soap is obtained, and, ultimately the sea-water itself. It is thence hunted through Nature, discovered in salt mines, and in springs, and pursued into all bodies which have a marine origin; among the rest, into sponge. A medical practitioner, Dr Coindet, of Geneva, then calls to mind a reputed remedy for the cure of one of the most grievous and loathsome disorders to which the human species is subject, viz : Goitre, which was originally cured by the ashes of burnt sponge. Led by this indication, he tries the effect of Iodine in that complaint, and the result establishes the extraordinary fact, that this singular substance, taken as a medicine, acts with the utmost promptitude and energy in Goitre; dissipating the largest and most inveterate, in a short time, acting as a specific against that deformity." By attention to this simple fact of allowing nothing to pass unexamined, one of the most potent therapeutic agents has been discovered; and we may remark, that, without a knowledge of Chemistry, its powers would have remained for ever hid, and without that peculiar aptitude for regarding nothing as trifling, which chemistry alone gives, this invaluable addition to our therapeutic armory, would have passed away undiscovered, and "like the baseless fabric of a vision, have left not a wreck behind."

In the infancy of the science, its power of supplying new remedies was appreciated. The vaunts of Paracelsus, in the 16th century, of the powers of his chemical remedies and elixirs, backed by his many surprising cures, convinced all rational physicians that chemistry could furnish many excellent remedies unknown till that time, and many experiments began to be made by physicians and chemists desirous of discovering and describing new chemical remedies. In this way, Antimony and Mercury were introduced to the profession. The true use of chemistry, says Paracelsus, alluding to the search for the Philosopher's Stone, 'is not to make gold, but to prepare medicines.'

I have said, there can be no scientific practice of medicine without a true and correct knowledge of Physiology. The physician, who is no physiologist, is little better than the empiric. He may, indeed, practice the Art, but can never attain to the Science of his profession. Now the very basis of Physiology, the ground upon which it rests, the tree from which it grows, is chemistry, and without that, it is a mere vague and baseless dream of the imagination, leading to innumerable follies and errors. The mere knowledge of external forms and physical properties cannot satisfy the physiologist. He every day becomes more deeply impressed with the importance, the indispensable and paramount duty, of becoming intimately acquainted with the ultimate, the chemical composition and changes of organic bodies. "How," says Liebig, "how differently would the treatment of diseases be conducted, if we had perfectly clear notions of the processes of digestion, assimilation and excretion. Without just views of cause and effect, without a clear insight into the very essence of natural phenomena, without a solid physiological and chemical education, is it to be wondered at that men should defend the most absurd notions, as that of the doctrines of Hahnemann;" the absurdities and infinitesimalities of Homœopathy, the crudities of Hydropathy, and the thousand *gaucheries* that bring the medical profession into odium and disrepute, should find disciples and defenders. "Without a profound knowledge of Chemistry and Physiology, physicians will obtain no light to guide them in the solution of their most important problems,

the investigations of the laws of life, the vital processes, and the removal of disease from the organism." Without a knowledge of the chemical forces, the nature and effects of the vital forces cannot be fathomed, and without a correct and due knowledge of the chemical agencies, the physician is as a pilot without a compass, a ship without a rudder.

Now, let us proceed and see in what manner an acquaintance with Chemistry may be directly useful to the physician. How, discarding all questions of physiology or science, in the abstract, it may be essential at the bed-side of the patient. The attention of the profession is now being daily directed to the treatment of a large class of diseases, formerly exceedingly obscure and deemed incurable—but which Chemistry has elucidated and proved to be among the most remediable of all the ills which are daily brought under our notice. I allude to the large class of diseases known as diseases of the urinary organs—an unfortunate and misapplied name, however—for in very many cases these organs are not diseased at all. The proper name for this class should be, diseases manifesting themselves by symptoms referable to derangement of the urinary secretion. I fearlessly affirm that no practitioner, who is not a chemist, can either properly detect or treat this large class of maladies.

In the first place, he is ignorant in what manner to discover them, even should he be aware of them; but the great probability is, that his attention never having been directed to them, he will be unaware of their existence, and will treat the unfortunate patient for some disease that does not exist, and thus, either aggravate the original distemper, or introduce one less amenable to treatment. Let us never forget that the diagnosis and treatment of disease are simply matters of question and answer; we should interrogate every organ of the body, and that one which does not give the proper reply, is the one that needs our assistance. One example is better than a thousand precepts. When I first came to this city, one of my earliest patients was a gentleman, who had been pronounced dying of an inveterate phthisis. He had undergone every variety of treatment and mal treatment, for two or three years, with no result; daily he became more emaciated and feeble, and seemed fast tottering to an early grave. He, as a mere matter of speculation, simply because I was a new physician, came to consult me, and told me he was in a hopeless consumption, and did not believe any chance remained for him. His appearance in truth was phthisical. He had cough, dyspnoea and night sweats. I asked questions of the various organs of his body: his lungs responded, they were sound; his heart said it was in a normal condition; his stomach, his liver, his spleen, all replied there was nothing the matter with them. There was clearly no consumption. But why, then, should this gentleman continue to waste and pine away? According to an invariable rule with me, in difficult and doubtful cases, I requested him to send me a specimen of his urine; and then the mystery was solved. Its specific gravity was 1.032. Was it diabetes? My test answered no! On further examination, the cause of this enormous waste was found to be the passage of urica in excessive quantity. In every ounce of urine he passed 32 grains of solid matter, consisting chiefly of urica, one of the most highly nitrogenized constituents of the body. The cause once discovered the remedy was easy; and I had the gratification, in a few months, of seeing this gentleman relieved from the horrors of a suspected consumption, being restored to health. Do not let me be misun-

derstood. I do not arrogate to myself any superior sagacity or skill. I simply called in chemistry to my aid in my search after disease, and she did not fail me, as, depend upon it, she will never refuse you, if you will diligently and earnestly ask her assistance.

In connection with this, let me quote a passage from the Hunterian oration of Dr. George Owen Rees, one of the chemical benefactors of medical science. Dr. Rees says: "The study of science increases the interest of the practitioner of medicine in every way. It assists him to analyze symptoms, to arrange and to eliminate them, and gives him a steadiness of purpose and a facility in arranging his ideas, which will be of vast service to him in many trying occasions. In order to show how closely this assertion accords with the fact, let me now, as an instance, direct your attention to the manner in which one who has followed chemistry as a favorite science, and has had his mind strongly imbued with the principles of chemical analysis, might be supposed to search for the cause producing hæmaturia, in some cases under his care, and thus simplify how his process of thought would accord with that which he would use in the chemical analysis of specimens of inorganic matter of simple constitution. The discharge of blood may be accounted for in many ways; it may come from any part of the urinary apparatus, and he looks to other symptoms in order to test the correctness of each of the forcible causes, as they severally present themselves to his mind. The chemist, having a mass of inorganic matter placed before him, goes through the same reasoning. It may consist of any one of a great many substances, but then these do not show the same re-actions when tested by re-agents, or, in other words, do not show the same symptoms. We will suppose he first applies heat to the mass, it remains unaltered; this fact at once excludes from his consideration every product of the animal and vegetable kingdom—one of which would have become either volatile or charred, and thus his task is greatly simplified. In the same way, in analyzing his case of hæmaturia, he would test by questions referring to calculus of the bladder as the cause; and on hearing of the absence of all such symptoms, he would at once simplify matters by dismissing from his mind the consideration of malignant disease, and of calculus in the viscus, both of which would produce some of the symptoms of calculus—his questions have acted as his tests did on the inorganic matter. To recur to the latter. The chemist next boils the substance in water; it dissolves: here, again, having separated the organic kingdoms, he further separates from his consideration all matters from the inorganic kingdom which are insoluble in water, for the substance was soluble; so that the elimination of its real nature is going on apace. To turn again to our patient. What must be our second test? We ask questions, (our tests,) referring to the prostate. The examination *per rectum* shows it of natural size, and the age of the patient is under 40, so that we may fairly exclude the gland as the source of the hæmorrhage. The chemist, having the soluble substance in solution, now applies the carbonate of potash to a portion of it, and finds the substance is not precipitable, by which he is enabled to exclude all substances precipitable by the carbonates. This shows him he is not dealing with a metal or an earth, both of which would have been thrown down; and as heat showed the substance was neither volatile nor destructible, it can now be nothing but an alkali or alkaline salt. Side by side proceeds the medical reasoning. We have

excluded the bladder and prostate as causes, and we now direct our test questions to the state of the kidneys. On doing so, we find there is pain in the loins, increased by exertion; that the hæmorrhage there tinges the whole urine; that the patient has occasional fits of vomiting. The previous symptoms or tests have now excluded the rest of the urinary apparatus, and we declare calculus of some kind in the kidney.

Now, for the chemist again. He has ascertained that his solution contains an alkali; he adds tartaric acid to a portion of it, there is an immediate effervescence; and on adding the same test in excess, he observes, after a while, a deposit of bitartrate of potash. He now knows he has been operating on a mass of carbonate of potash, and his labor is ended.

To return again to the patient: we have determined he has calculus in the kidney, and we now look for symptoms to show its nature. Our questions acting still as tests, we ascertain he is of a gouty family, and that he often passes red sand in his urine; we conclude, therefore, that our case is one of uric acid in the kidney.

In this argument, we see clearly how closely allied to the interest of both patient and physician is a knowledge, and that not superficial, of chemistry. I do not say a good chemist is necessarily a good physician, any more than a good anatomist is a good surgeon; but I do say that a man is an infinitely better physician for being a good chemist, and instances will occur daily and hourly in which he will find it so, and will look back with a vain regret, should he feel his deficiency.

We have now to consider another phase in the career of the physician. It must be remembered, and cannot be too strongly impressed upon the mind of any one intending to enter the ranks of the profession, that the physician will and must be the constant referee (for the public) in all that relates to science and physical phenomena. To him will be referred, for solution, all questions that bewilder the general mass. His opinion will always be required, and he will be the universal counselor; and to be a perfect practitioner, his knowledge should be almost encyclopedic. However absurd it may seem to us, the success in life of the physician will frequently depend upon the answers he may give to questions that seem in no way to bear upon the profession he represents, and his skill and professional attainments will not unfrequently be judged of by his readiness and tact in affording solutions to the many vain, and, it may some times happen, irrelevant subjects which the public will consider it his duty to know. No science will give him this readiness, no single science will give him such a magazine of general knowledge as chemistry, which encloses within its arena the elements, and brings within its range the principles, of all sciences. It may be called the substratum, or foundation stone, of all physical science; its illustrations are drawn from Botany, Geology, Astronomy, Natural History, &c.; and the thorough chemist may be considered a graduate, if not an adept, in all the departments of human knowledge.

Let us now see how chemistry applies to Therapeutics. Let us ask the question, how any physician can write even a single prescription without a knowledge of chemistry? The very elements of his science rest upon it—he cannot proceed a step without its assistance; without it, he will be in constant danger of confusion; of giving the most heterogeneous substances, and of producing the most singular combinations. Let us never forget that the most innocent substances, when combined

chemically, produce the most poisonous compounds—that the ambient air which bathes our tissues, which pervades our entire system, without which we should perish, is composed of the same elements as the corrosive nitric acid—that the addition of one equivalent of chlorine more, changes the comparatively innocent calomel into the deadly corrosive sublimate, and that an inattention to the chemical properties of the metallic substances may transmute the most innocent into the most lethal compound; but even if the prescriber should not poison his patient, he may so combine remedies as to render them inefficacious and inert, or productive of results different from those calculated on or required. Acids and alkalis may be given in the same mixture—substances which mutually decompose each other given together. We will suppose a physician, ignorant of chemistry, called to a case of hæmoptysis—he knows that one of his best astringents is sulphuric acid; he is also aware that acetate of lead is one of the most potent styptics; to make assurance doubly sure, he will join the two together, and the result will be the insoluble and inert sulphate of lead. He may desire to give an effervescing draught; he will prescribe muriatic acid and carbonate of soda, the hapless patient will take a solution of common salt; salts of iron will be prescribed with vegetable bitters containing tannin as their bases, and the result will be writing ink. Let it not be supposed that cases like these are purely hypothetical. I myself have seen mistakes as gross as any I have mentioned. It is true that any work on the *Materia Medica* has or had a long list of substances marked incompatible; but it would be impossible for the memory of any living being, however gigantic, to retain it; whereas, the knowledge of a few simple chemical principles will prove an effectual safe-guard against all such error.

But heavy as is the physician's responsibility in instances like this, a heavier still remains. Cases are unfortunately of occurrence where the physician is the direct arbiter of life and death, where his knowledge or his ignorance determines the question, where the hesitation of a few minutes may give the casting vote whose result is mortal; where, as the priest of Holy Writ, "he stands between the living and the dead." I allude to cases of poisoning, either intentionally or accidentally. Here, indeed, the only resource of the physician is his knowledge of chemistry. What must be the feelings of such a man, when called to a patient, to whom, by some means, a poison has been administered, and who looks to the physician as the only human being in whom he can put his trust? and he, the one who holds within his hands the destiny of the unhappy patient, is compelled to stand idly by, and curse the ignorance which has made him morally a homicide! No time is there to refer to books—he vainly tries to recall something he has heard during his student life; but alas! nought remains but a dim and indistinct idea, and he wrings his hands in painful helplessness and sees his fellow man, his victim, expiring before his eyes.

Let us suppose an error has been made; a patient has been given by mistake (and unfortunately it is not an uncommon one,) Oxalic acid for Epsom Salts. How shall he detect the difference? How shall he relieve the unhappy sufferer? A slight acquaintance with chemistry will tell him that the oxalate of lime is insoluble; that any piece of chalk—nay, that a plastered wall—would be a safe-guard and an efficient antidote.

He may be called upon to testify in a court of justice : on his fiat may depend the acquittal or conviction of a fellow being. To him may be confided the task of discovering the guilt or innocence of his fellow man. To him may be given the task of lifting the impenetrable veil, of removing the mask of guilt—of revealing the subtle poison, whose agency has snapped the secret springs of life. And how will he perform this task with a knowledge, aye, an intimate knowledge of that science, whose elements embrace the whole circle of his profession? I might descant upon this subject for hours ; but time wanes, and I must pass to another branch of my discourse—the positive benefits which Chemistry has conferred on Medicine. I have only time to advert to a few, but some are as important and have been productive of as much saving of human life as the immortal discovery of Jenner.

The use of lemon juice and fresh vegetables in the treatment of scurvy and purpura is due to their supplying to the blood an element in which it was deficient, potash. We use preparations of iron in anæmia, because we know that the disease depends upon a deficiency of this metal in the blood.

We find, by chemical analysis, that a large proportion of the constituents of bone consist of the salt, phosphate of lime ; chemistry suggested its use in the disease called mollities ossium or rachitis, and in supplying bone callus after fracture, and the recommendation has been attended with benefit. We use cod-liver oil in phthisis, because being rich in carbon, it supplies the system with a material which is being constantly consumed by the oxygen of the air. In lead colic, where the system is saturated by the metal, we employ a substance, the iodide of potassium, which forms a soluble salt with the metal, and by which it is eliminated in the urine. We protect those who work in lead by advising them to use a sulphuric acid lemonade, by which it is converted into an insoluble salt, and is incapable of being absorbed, and thus from producing its deleterious effects. Instance might be multiplied upon instance of the direct application of chemistry even to the most practical part of medicine, and of its immense benefit, not only to the physician, but to the world.

It has been said that the man who makes two ears of corn grow where but one grew before, is a benefactor to his country ; then, surely, he who discovers a remedy by which the maladies of thousands are alleviated, or who, by the application of sanitary laws and regulations, prevents any of the thousand ills which afflict suffering mankind, deserves the same title. It is only in the application of chemistry to medicine, that the solution of these enigmas is to be found.

I trust I have said enough to impress upon your minds the necessity of making chemistry a paramount and principal portion of your studies. Believe me, I have not exaggerated its importance ; and you will never have occasion to regret, in your after career, the time spent in acquiring its principles.

It now only remains for me to inform you of the plan on which I shall endeavor to instruct you, and the course I shall pursue during the ensuing session. My object will be to make the entire lectures subservient to your wants as physicians ; and with that view, I shall not dwell at any length upon the imponderable agents, but commence at once with the practical portion of our subject. We shall examine in detail the

gaseous constituents of our system, and dwell at some length upon the metalloids and metals which enter into our *Materia Medica*; and although in your lectures on therapeutics, you will be taught in full the application of all the substances in the *Materia Medica*, yet I shall deem it my duty to consider these in their relations to medicine. Physiological chemistry, the basis of a rational system of practice, will receive a full and efficient share of attention. It is my purpose (your Professors of Practice and Surgery have kindly yielded to me the privilege) to include, in this session, a full course on the nature and treatment of diseases of the urinary organs, a class now occupying a station by themselves, and whose pathology has received a full elucidation from the combined labors of a Golding Bird, a Prout, and a Rees.

Previous to the conclusion of our term, it is my intention to devote a series of lectures to the consideration of a branch hitherto, in this country, somewhat neglected, but whose importance cannot be too highly estimated, viz: Forensic Medicine and Toxicology—or the means employed for the detection of poison after administration, with the modes of counteracting their deleterious influences.

Such is a comprehensive plan of the course I shall pursue; and I can assure you, no labor shall be spared on my part to render you familiar with all the details of this branch of your profession. For this purpose, we have a Laboratory stored with all the most needful appliances, for the fullest course of chemical or physical investigation; no expense has been spared to render it complete, even to the most minute particular; and I may say with pride, that we, in the infancy of our Institution, may vie with the oldest and most venerable schools in this or any other country. This Laboratory will be open to all of you who wish to engage in the practical department of chemistry; and it will be my pleasure, as well my duty, to assist all who desire instruction in manipulative details. And now, in conclusion, let me say that I hope you will consider me but as a student like yourselves, a little more advanced, and therefore more capable of assisting you in your studies; and should, as is probable, anything escape from me during the lecture, which you may not readily understand, I shall expect you to question me afterwards, and trust you will not leave me until all is explained and thoroughly elucidated.

I must, for the present, bid you farewell, and hope that the ensuing five months may be to all of us a source of lasting as well as instructive acquaintance.—*N. O. Medical & Surgical Journal*.

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*Aphorisms on the Hygiene and Nursing of Infants.* From the last edition of BOUCHUT'S "*Traité Pratique des Maladies des Nouveaux Nés et des Enfants à la Mamelle.*"—Translated by J. C. R., Dayton, Ohio.

The child should be subjected to hygienic regulations from its cradle, in order to sustain its constitution if it is good, in order to ameliorate it if bad.



We must combat, in early infancy, the scrofulous, gouty, and syphilitic dispositions inherited from the parents.

A man with impure blood should never think of perpetuating his race.

A woman who becomes *enceinte*, should renounce those habits, pleasures and fatigues, which may exercise an evil influence upon the health of the fœtus, if she wishes to give birth to a healthy child.

Blood-letting has a good effect upon gestation, but it should not be used unless plethora, local, or general, is present.

Denial of the unreasonable caprices of a pregnant woman cannot have any influence upon the health of the infant.

A woman can and ought to nurse her child, if she is in good health; and if her parents or immediate relations are not scrofulous, consumptive, or cancerous.

There are women of good constitution unable, nevertheless, to nurse, for their milk is small in quantity, badly elaborated, and dries up from the slightest causes.

A woman in whom the mammary secretion is very active previous to her accouchment, is almost always a good nurse.

A mother who nurses, can commence six or eight hours after the birth of the child.

A woman who nurses should not suckle the child oftener than every two hours.

- An infant that takes the breast at regular intervals, sucks with more avidity than others, and drains the breast of all the milk it contains—and it is the part last obtained which is the best, as it contains more cream than the first parts of the flow.

Between eleven o'clock at night, and six or seven in the morning, a good nurse need only suckle the child once.

It is dangerous to take, for a hired nurse, a primiparous woman; she is necessarily inexperienced.

A good nurse is from twenty to thirty-five years of age, with brown hair, the gums bright red, the form inclined to *embonpoint*, the breasts well formed, firm, and with bluish veins.

A nurse should not have any mark, recent or ancient, of scrofula or syphilis.

The milk yellowish in the first months after birth, and bluish white afterwards, is an alkaline emulsion formed of water and solid principles dissolved or suspended.

The butter is only suspended in the liquid; the other principles are dissolved.

The milk should be abundant to be profitable.

The first part of the milk drawn from the breasts is serious; the second part is thicker, and it is the last part of the draught which is the richest and the most charged with cream.

The milk (examined by the microscope,) should be filled with globules, numerous, tolerably large, and well formed—for small globules, resembling dust, are a sign of its bad elaboration, and of its insufficiency.

Too few, or too many globules, are equally injurious.

The milk varies in its composition according to idiosyncrasy, temperament, constitution, the time elapsed since the accouchment, the time since the last repast, the regimen of the nurse, the action of the genital

organs, etc., etc ; but the differences are not so great as to modify the precept : " If the infant thrives, then the milk is good."

The milk is altered in composition by the febrile state, and by acute and chronic diseases

Fever diminishes the quantity of milk, reduces the number of globules, and concentrates its solids in a smaller proportion of water.

The effect is the same, in different degrees, in all acute affections and in some chronic ones.

Pus is sometimes mixed with the milk, in cases of abscess of the breast.

The influence of diseases upon the composition of the milk, is not special and specific, for they all have the same effect which is the same as that of fever.

The milk of a healthy nurse, which is too rich, or too highly charged with solid elements, is indigestible, and causes diarrhoea.

Milk altered, reduced and impoverished, by fever or by disease, also causes diarrhoea.

Milk altered in its composition by fever, or disease, does not always exercise an injurious influence upon the health of the child.

Whatever may be the cause of alteration in the composition of the milk, the result is always the same for the infant—the accidents which arise have always for their seat the digestive canals, and diarrhoea is always the consequence.

Milk which does not present any alteration appreciable to chemical analysis, may yet be altered in its intimate elaboration in such a manner as to make it an injurious aliment.

Spasms, or instantaneous convulsions, result ordinarily from changes caused in the secretion of milk by mental affections, too lively emotions and impressions, agreeable or painful, experienced by the nurse.

Mental impressions dry up, suddenly, the secretion of milk, or modify, seriously, the proportion of its solid elements.

The happiness which a woman feels in fulfilling her duties of nurse, is the cause of the internal sensation, at the moment she is going to nurse the child, known as the *draught*.

The premature return of menstruation in a nurse, modifies, slightly, the chemical composition of the milk, and injures its elaboration ; but if the infant does not appear to suffer, which often happens, the nurse may be retained.

A nurse should abstain from sexual intercourse, if she experiences great excitement.

A nurse should likewise abstain through fear of pregnancy, which modifies the milk in quantity and quality, so as to render it injurious to the child.

A change of nurses has no injurious effects, when necessary to replace a poor one by a better.

The nurse should be changed as often as may be necessary.

Suckling, by mother or nurse, may give place to artificial feeding.

Feeding by the nursing-bottle is far inferior to suckling—although when well carried on it sometimes yields highly satisfactory results.

Artificial food should be administered during the earliest periods of life, means of nursing bottle, filled with tepid milk, diluted with barley-water, or oat-meal gruel ; afterwards with milk alone.

An infant needs nothing more than milk, during the first months of life. At the age of six months it may commence to take light soups.

Greasy articles of food should not be given until after the first year.

The time of weaning should be fixed between the twelfth and twentieth month.

One of the periods of repose in the progress of dentition, should be chosen for weaning—that which comes after the appearance of the first twelve, or of the first sixteen teeth.

Weaning should be commenced by keeping the child from the breast during the night.

After some weeks' separation from the mother at night, the child should be denied the breast in the day time also, and it thus arrives at an independent existence.

Infants and children should be carried into the sunlight and open air in all kinds of weather.

Clothes which fit the body, without constriction, are preferable, in all weathers, to loose ones, which expose different portions of the skin to the cold.

Infants should be washed in tepid water, every day, and as they become habituated to it, in water nearly cold.—*Western Lancet*.

## EDITORIAL AND MISCELLANEOUS.

## EDITORIAL CORRESPONDENCE.

PARIS, DECEMBER 7th, 1856.

*Dear Doctor*—Exclusive systems of practice in medicine, and methods of operating in surgery, or perhaps I should be better understood were I to say, hobbies in the practice of medicine and surgery have done as much to retard the progress of science as any one consideration. All combat the principle, yet all are to some extent culpable, and worse; it is usually those who have position and influence that are most persevering in forming theories, and proposing operations, and for a series of years, bending facts, however stubborn, to suit and support their peculiar views. No one who is the least familiar with the history of medicine and surgery will, for a moment, doubt the truth of this proposition. Let us then all be upon the alert, watching ourselves as well as our neighbor, and if we should see any thing rational attended with happy results, to whatever extent we may be enraptured with our own peculiar views, let us not pass it by as unworthy of consideration, but stow it away until circumstances shall make it practicable. There are accidents and deformities requiring operations which, in different cases, differ so much in extent, position, &c., that no one method of operating, however successful in the majority of cases, can be applied with the same happy result in all. Vesico-vaginal fistula, which is at present exciting considerable attention, and for which several new methods of operating have been proposed within a few years, is an example of this class of accidents. In this loathsome lesion, as in many others, it is evident that no one method can be alike applicable in all cases—that the operation proposed should be dictated by the position and extent of the lesion, and other considerations surrounding the case, rather than by our predilections for any favorite method; and that the greater

the number of successful methods proposed, the greater will be our resources. With this view, I have thought it not amiss to record here the method adopted in a case, some time since, by M. Nelaton, which although not new, (the figure of eight suture,) still the manner of introducing and extracting the pins is certainly worthy of consideration.

The fistula was small, rather transverse, extending more to the right than to the left of the median line, nearer the neck of the bladder than the neck of the uterus. After bringing down the neck of the uterus with Museux's forceps, the os externum being previously dilated, the fistula could be readily seen; the edges were now freshened with considerable loss of substance, removing the entire cicatrix—a procedure which M. Nelaton considers essential to the success of the operation. Three ordinary suture pins, with a thread firmly attached to the head of each, were now introduced as in an ordinary wound, and the freshened edges brought accurately in contact by means of a ligature passed around the pins in the form of a figure 8. The pins were so directed that the head of each pointed towards the mouth of the vagina, so that by means of the threads attached which passed out of the vagina, they could at any time be extracted without distending the vagina, or otherwise interfering with the wound. A catheter was secured in the urethra. On the fifth day after the operation the first pin was removed by means of the thread attached, two days after the two remaining pins were removed in the same way; the urine all the time passing through the catheter. Two weeks after the operation, the catheter was removed, when it was found that she could, for a length of time, retain her urine, passing the whole per urethra—demonstrating the entire success of the operation. Upon examination sometime after, it was found that the wound had united regularly in its whole extent. It is evident that this method cannot be adopted in all cases, but when applicable, is certainly rational, and from the above result, may be performed with success.

Since my last letter, we have had, in Paris, the "Blue man," Butler, of New York; he, for several days, occupied a bed in the wards of M. Nelaton, and during his stay was the centre of attraction. Butler, as you are apprised, is a striking example of the discoloration of the skin by the long and continued

use of nitrate of silver, administered in his case with the hope of relieving an inveterate epilepsy, with, however, no very favorable result, as he is at present in Europe to be treated, not for the discoloration of the skin, with which I believe he is rather pleased, but for his epilepsy. This case certainly proves the permanency of such discolorations, as it has for eighteen years resisted all attempts to remove the deposit. Butler, it appears, has been submitted to quite a variety of plans of treatment for the relief of his epileptic attacks; more recently, Dr. Green, of New York, cauterized the larynx and trachea by means of the probang, with no favorable result. Dr. Parker, of the same city, proposed castration, the proposition, as Butler says, having for a basis the favorable result of some cases operated on by a physician of Georgia, whose name I can not at present recall—you, however, I am confident, will recollect the report. Butler crossed the Atlantic to place himself under the care of Marshall Hall, who saw him during his recent visit to America, and proposes to cure his epilepsy by tracheotomy. Upon his arrival in London, and finding Dr. Hall absent for some length of time, he visited Paris to have the opinions of some of the most prominent physicians. Not finding M. Nelaton disposed to favor any operation, but to experiment upon the deposit, he left the hospital and Paris, for London, I suppose.

The discussion at the *Académie de Médecine*, upon the treatment of ovarian dropsy, so frequently referred to in my letters, has been closed, not before, however, all the members of that savant body, who were disposed, had expressed their views upon this complex proposition. As remarked in a previous letter, it is not convenient here for me to follow this discussion in all its meanderings, and were I to attempt it, I doubt very much whether I should render the subject less complex—whether I should not, by recording the diversity of opinions, add to the confusion which already exists. Much has certainly been said, both for and against the interference of the surgeon, and much upon either side to no purpose. As in almost all discussions, there has been two extremes, both, perhaps, alike irrational—the more practical occupying a happy medium. It is evident, however, that the old doctrine of non-intervention, if you will allow the expression, as regards the

radical treatment, has received a blow from which it is not likely ever to recover.

M. Velpeau closed the discussion; his remarks, upon that occasion, were entirely practical, and was certainly the best solution of the whole subject that has been given during the discussion; so important do I consider this last effort, that I give it below (in substance) at the risk of worrying you with this subject. That it may be better appreciated, I propose before doing so, to make an extract from a memoir read before the *Académie* by M. Creuveilhier. In this memoir we find the following in regard to the varieties of ovarian tumors:

“Cysts of the ovary do not always constitute the same anatomical lesion. The question of treatment which should always be surgical, will depend to a very great extent upon the character of the cyst, as regards the liquid it contains, the disposition of its walls, and its structure. As to the liquid they contain, they may be divided into *serous* cysts, containing limpid serum or serum of various colors; into *albuminous* cysts, in which the liquid resembles the white of an egg; and into *gelatinous* cysts, the contents resembling jelly; these distinctions, although extremely important in a therapeutical point of view, are not always easily established by the character of the fluctuation.

As regards the disposition of the cysts themselves, they may be divided into four varieties: firstly, *unilocular* cysts; secondly, *multilocular* cysts; thirdly, *areolar* or *vesicular* cysts; fourthly, *compound* or *complicated* cysts. The latter being the result of the association of a unilocular with a multilocular cyst, or either of these with the areolar or vesicular; again, a cyst may be considered compound or complicated, when it has for its basis, a fibrous tumor of the ovary.”

The above is perhaps the most complete as well as most practical division of ovarian cysts. It is true that several of them are extremely rare, yet all have been recognized.

M. Velpeau's conclusion was in substance as follows:

“The question at present under discussion before the *Académie* is extremely complex. For its solution, it is necessary to determine, firstly, the ordinary duration of the disease; secondly, its gravity; thirdly, the value of the various plans of treatment to combat it: that is, to determine, for example,

whether a radical cure ever follows the simple puncture, and in what proportion of cases, and if the treatment by injections be proposed, to determine whether iodine is better than all others; and fourthly, to be able to distinguish the various cysts.

“The first proposition,—the duration of ovarian cysts—can it be determined? What has been said here in regard to their duration is far from being exact. Two, six and ten years have been given as their term of duration; how have they arrived at such conclusions? At the commencement,—that is to say, when the cyst has but the size of an egg or an orange,—it is seldom recognized; and often, when recognized, and the physician called, it is extremely difficult to determine the date of its origin; again, are not all apprised of the very great difference in the march of serous collections? In dropsy of the tunica vaginalis, for example, there are some cases that acquire a development in six months that others are six years in attaining. In some women, again, ovarian tumors are recognized much earlier than in others; thus, it is evident that in a delicate woman, with thin abdominal walls, a cyst would be much easier and earlier detected than in a corpulent woman, with thick abdominal walls. It is, then, extremely difficult to determine the ordinary duration of such cysts. I have seen ovarian tumors the size of a large orange, acquire, in less than a year, the dimensions of the head of an adult, and after arriving at that point, I have known quite a number of women to live four, ten, fifteen and eighteen years. Taking all into consideration, I am of the opinion, that, in the majority of cases, women attacked with this form of dropsy, may live six, and perhaps even more than eight years after the tumor is of sufficient size to be detected; and since, in a number of cases, life is prolonged, without the intervention of any treatment whatever, to fifteen and eighteen years, it would be extremely imprudent to adopt any plan of treatment that would be attended with great danger. But, as it must, sooner or later, prove fatal, it is certainly rational to interfere.”

Arriving at the third proposition, M. Velpeau adds: “Can cysts of the ovary be cured by the administration of internal remedies? The negative response of MM. Cruveilhier and Trousseau greatly surprised me, as I am certain that I have



seen cases cured in this way. The idea has been advanced that ovarian cysts, from their isolation from the organism, were not under the influence of internal remedies; it has been asked, how it was possible, under such circumstances, for absorption to take place. I might ask, also, if the organism, under such circumstances, secreted such large quantities of liquid, why it is, that, under the same circumstances, it might not be absorbed. This is a question, however, that cannot be determined except by facts. Hydrocele, although very rarely, it is true, sometimes presents examples of spontaneous cures.

M. Velpeau here mentioned a case of hydrocele, in which he proposed an operation, which disappeared spontaneously in less than forty-eight hours.

When the cysts, adds M. Velpeau, are very small, this spontaneous or accidental rupture may result in a radical cure, as has been cited in several cases during the discussion; but often death, is the consequence. In a report of 72 cases of such ruptures, by Tilt, there were thirty deaths; making it, by no means, a desirable accident—it is not, however, very frequent. I have only observed it twice, and in both cases death was the result. At the commencement of this discussion, I mentioned some cases in which the simple puncture was followed by death. I had no idea at the time these facts were mentioned, that they would occasion the long and deplorable statistics that have been produced in this discussion.

According to Southom, as cited by M. Trousseau, in twenty-one cases of simple puncture, there were four deaths during the first twenty-four hours, three during the first month, and fourteen during the first year. In thirty-six cases reported by Lee, there were three deaths in the first twenty-four hours, six during the first few days, twelve in one year, five in three years, one at the end of six years, and one at the expiration of fifteen years. In a report by Kiwisch of sixty-four cases of simple puncture there were nine deaths during the first twenty-four hours, six after a second puncture, fifteen after the third, fourth, fifth or sixth puncture. It would appear from the above, that the simple puncture is extremely fatal in England and Germany; something which I must say, in all candor, does not appear to me possible. We have never seen any such results in France. I said that I had seen four deaths from the simple

puncture; they were cases very grave and complicated—gelatinous and multilocular cysts—but no one of them died in twenty-four hours; all lived for some length of time. Within the past thirty years, I have performed this operation quite a number of times, and with the exception of the four cases above-mentioned, have never seen death as the result of the puncture—all have lived four, five, six, and ten years, some few as many as fifteen years. This, as you see, resembles, in no particular, the frightful statistics above alluded to. Why is this? Statistics are frequently on the order of *Æsop's Fables*; in which is found all that may be desirable for good or bad. It is more than probable, that the statistics above referred to, are not exact; I shall not, however, attempt here their solution. After a review of all that has been said, I am still firmly of the opinion, that the simple puncture within itself, is not fatal, and is generally inoffensive. Will it cure ovarian dropsy? Some cases; I saw one example, several years ago, in connection with Récamier and Nelaton. The simple puncture like the spontaneous rupture, sometimes results in a cure, but it is necessary to say, that such cases are exceptional. Has it no inconveniences? It certainly has. Where we are forced to resort to it frequently, for the relief of urgent symptoms, we, in the end, exhaust the patient. It should be resorted to rarely, and with decision.

The extirpation of the cyst! There is a singular contradiction between the idea, that is, with reason advanced, of the extreme gravity of the operation, and the statistics of the English and American surgeons. I shall not attempt here to explain this contrast. It is very certain, that I shall never dare perform such an operation; and I should here say, in honor to the surgeons of France, that this operation has never found favor with us.

I come now to the treatment by the injections of iodine. This method is not as new as is generally believed—the injection of cysts was practiced during the past century. How is it, then, that this method is creating at present, such an emotion? It is natural we should apply to cysts of the ovary, what has been applied to hydrocele; this is exactly what has been done. As the liquid, that was first employed in the treatment of hydrocele, was extremely irritating, it frequently

happened that the inflammation went beyond the limits that were then thought necessary to insure a cure, and resulted in extremely grave accidents. This prevented the generalization of such injections. But, as it was demonstrated to my satisfaction, that for the cure of such collections, it was not necessary to determine in the walls of the cyst, a high grade of inflammation, and, that iodine, which is much less irritating than wine, produced sufficient irritation to obtain the result desired, without the risk of accidents so frequent from the injections of alcoholic liquids, I saw at once, the advantages that would result from applying the treatment of hydrocele to the various cysts, and thus multiplying its use. This question, besides, is not new; it was discussed here in 1846—I then expressed my views before the *Académie* upon this point; they were supported by M. M. Bérard and Jobert, and combatted by Blandin, Gerdy and Roux. It was at this epoch, that several surgeons commenced studying this subject, and that M. Boinet commenced his experiments, which he has multiplied and studied with such zeal and care, that this method has been recognised as his—bearing his name.

In the practice of M. M. Boinet, Robert, Monod, Demarquay, Huguier, Briquet, Nelaton and in my own, we have a total of 130 cases of ovarian dropsy, treated by the injections of iodine. Let us see what we will have from the analysis of 130 operations. In this number, there were thirty deaths and sixty-four cures. Thirty deaths in 130 operations! This is certainly a very heavy per cent., and I would be little disposed to defend the operation, did I believe that such a per cent. of deaths would necessarily result. Let us go still further and determine the circumstances, if possible, that produced this result. By what accidents did these thirty women die? When I performed the first few operations of this kind, that which occupied me all the time, and sometimes arrested me, was the danger of injecting such a vast cavity, with the great difficulty in determining the character of the cyst upon which I was operating. It has been said here, that the diagnosis of ovarian tumors is attended with no difficulty. My compliments to any of my confrères who are of this opinion. As to myself, I must say, that I have found the diagnosis, in a number of cases, extremely difficult. When these cysts are small, it is

certainly very difficult, if not impossible, to distinguish the true cysts of the ovary, from other cysts or collections of liquid in that region, as cysts of Wolfeian bodies, extra-uterine pregnancy, circumscribed dropsy of the peritoneum, &c., &c. When the cyst is sufficiently large to overcome this confusion, and it being recognised without difficulty, there is something still of great importance to determine—to consider the character of the liquid it contains. All know the difference in point of gravity, and curability between a serous and a gelatinous cyst. Not only does the liquid differ in different cysts, but I have demonstrated that in the same cyst—we may have at different examinations a liquid which differs greatly in aspect. Thus, a serous cyst to-day, may later become sanguineous, and vice versa. Besides, I have seen cysts in which the first liquid extracted presented the color of blood, and later, the cyst becoming distended, the liquid was serous. It was the result, most probably, of the injection of iodine—thus transforming its walls. I have often had an opportunity of witnessing this transformation in hydroceles—to see a hydrocele, in the liquid presented; the color of blood, to become later serous. I have, by observing such cases, learned to produce this transformation artificially. I have often cured hydroceles of the above character, by converting them, by means of the first injection, into an ordinary hydrocele.

The operation by the injection of iodine, is it attended with danger? What are the dangers? I must acknowledge, that I, at one time, dreaded greatly the inflammation of the cyst; but I have since learned that it is not to be feared. The inflammation is never intense; and is always limited to the point the liquid touches. Neither do I fear the puncture, as I have learned from experience, that the simple puncture is not dangerous.

Where is the danger then, and how can we explain the development of fatal accidents? My impression is, that the accidents are the result of the employment of the canula or tube, as practiced by some surgeons. The method of operating in which the canula or tube is left in the cyst, is certainly objectionable, as it is almost always attended with a suppurative inflammation of the walls of the cyst. In the statistics of this operation, the methods of operating have been con-

founded ; there is, however, a very great difference ; for example, between the method by canula or tube, and the subcutaneous process ; a difference which satisfactorily explains the difference in results. In the subcutaneous method of M. Guérin, there is rarely ever suppurative inflammation, while in the process with canula, there is, as above suggested, almost always suppurative inflammation, which, in the majority of cases, is kept up until the patient is exhausted, notwithstanding the repeated injections of iodine.

Let us see, now, what were the methods adopted in the thirty cases before mentioned, that proved fatal. In twenty of the cases a canula was left in the cyst, if I am not mistaken ; then, we may very well attribute the unfavorable results in the twenty cases, to this circumstance. There are only ten cases then, where death may be attributed to the injections of iodine. Ten deaths in 130 operations is not such a great per cent. ; it is certainly a very satisfactory result in any new operation, where there is such hesitation in its performance. When, then, it is demonstrated that the treatment of ovarian cysts, by the injection of iodine, is not more fatal than the simple puncture, with many more chances to cure, it must be accepted as a method with many advantages.

In resumé, then, I will conclude this subject by saying, that cysts of the ovary, the most frequently mortal in a length of time, extremely variable, but which may be approximated at a few years, say six or eight, one but little affected by internal remedies, may rupture spontaneously ; but such ruptures, although sometimes followed by a cure, is ordinarily very fatal. That the simple puncture does not offer, within itself, any great danger, but that it is to some extent, objectionable, where it is for a long time, and at short intervals repeated—as under such circumstances it exhausts the patient—that the proposition to extirpate such cysts should be rejected—that the methods by injection, although dangerous where irritating liquids were used, have become inoffensive, and of great advantage since iodine has been adopted—that the injections of iodine is, without doubt, of great utility in *serous* cysts. As to the other forms of cysts, the wisest plan is to let them alone.

PARIS, DECEMBER 20th, 1856.

In a letter a few weeks ago, speaking of the treatment of syphilis by means of numerous inoculations with the pus from a primitive chancre, or in other words, by *syphilisation*, I promised to keep you informed of the progress of a case in the wards of M. Nelaton, which is being submitted to this new treatment. The inoculations have been constantly going on—the patient at present presenting between eighty and one hundred chancres. The idea of such a number upon one patient would, without further explanation, appear frightful, and would at once lead us to conclude that, aside from the disgust and suffering, which we would imagine great, under such circumstances, there would be more or less constitutional disturbance, neither of which is the case—the patient appearing more comfortable, and certainly in better spirits than before the commencement of the experiments. From the first crop of chancres, which were large, the successive crops have gradually diminished in size, until at present they are not larger than a grain of wheat, it being with difficulty that the inoculations take effect. As to the actual condition of the patient, there has been no very marked change, the most important being, the disappearance of osteocope, which, before the commencement of the inoculations, existed to such an extent as, frequently, to prevent the possibility of sleep. The nodes on several of the superficial bones have, perhaps, to some extent, diminished in size. It is evident that the disease is making no progress, and, from all the symptoms, would appear to be yielding to its treatment. It is impossible, however, to speak positively upon this point, as in a few weeks we may see the disease recommence its ravages. As soon as the inoculations, which are at present made with the pus from previous inoculations, entirely cease to take effect, they will be recommenced, as at first, with pus from a primitive chancre. This case is watched with great anxiety by the friends of the doctrine of syphilisation, as a favorable result would place them entirely beyond the reach of their adversaries, at the head of whom is M. Ricord.

I visited the wards of M. Maisonneuve a few days ago, to witness an amputation of the leg, without the use of saw or knife—a novel proposition, you will readily agree. I, how-

ever, only saw the operation upon the dead subject, and after witnessing it, was thoroughly convinced that such operations should be confined strictly to the dead-room. The operation consists in first breaking the bone by means of a machine which

I shall not attempt to describe, and afterwards to make a section of the soft parts, a few inches below the fracture, with the *ecraseur*, so much vaunted by M. Chassaignac for the extirpation of polypus of the uterus, hemorrhoids, &c., consisting in a chain or piece of wire passed through a metallic box and tightened by means of a screw, thus dividing the tissues by constriction; after the complete division of the soft parts, the limb is detached by forcibly tearing the bone from the muscles. One of the objects in this plan of amputating, is to prevent the loss of blood, he contending that there is no hemorrhage from the division of the tissues, however vascular, and even of large sized arteries, with the *ecraseur*. There are other considerations which he did not discuss, and which I shall defer until I see the operation upon the living subject, which will likely not be a great while. He has amputated an arm by this process—the patient died, however, in a few days after the operation.

There are, at present, in the wards of M. Velpeau, four cases of fracture, which, from their rarity and other considerations, are not without interest. The first case that I shall notice, and which is the least frequent of all, is a fracture of the internal portion of the glenoid cavity,—the result of a fall, which, at the same time, produced a dislocation of the humerus downwards and forwards, the fracture being produced by the force with which the head of the bone was driven against the internal lip of this cavity. There is always a dislocation of the humerus accompanying this fracture, the most prominent symptom being a reproduction of the dislocation from the slightest motion; crepitation is possible after the reduction of the dislocation. The treatment consists in fixing the head of the humerus in its proper position for fifteen or twenty days. M. Velpeau contends that this fracture is not so rare as is generally supposed; that its existence is frequently not recognized by the surgeon.

Another case in the same locality, and also very rare, is a fracture of the anatomical neck of the humerus—an intra-capsular fracture of the neck, the solution of continuity being

entirely above the insertion of the capsule—the head of the bone resting without attachments in the capsule. If there be no great muscular developments, nor impaction, the fracture is readily recognized by the mobility of the detached head, crepitation, &c. What should be our prognosis in such a fracture? Will we have union of the two fragments, or necrosis of the detached head? M. Velpeau contends that if the humerus be kept fixed in a favorable position, that in quite a majority of cases, the functions of the limb, to a great extent, at least, will be restored in a few weeks. The case under consideration is in support of M. Velpeau, as three weeks have past without any accident; the patient appearing to be doing as well as could possibly be expected. Notwithstanding the views of M. Velpeau, and the favorable result of the above case, I am disposed to believe, as Prof. Erichsen has suggested, that when we have such favorable results, that there is either an impaction of the fragments, or else the fracture at some point, at least, has descended below the insertion of the capsule, the superior fragment receiving its support from this membrane.

The other two cases, a transverse fracture of the patella, and a fracture of the olecranon process, are comparatively much more frequent, but from the various plans suggested to retain the fragments in contact, are not less interesting. The fracture of the patella, as above suggested, is transverse, the result of a fall, the knee coming in contact with the curb-stone. After discussing the modes of union of this fracture, and the value of the various kinds of apparatus proposed for its treatment, M. Velpeau concluded by saying, that although there are upon record several well attested cases of osseous union, that as a general rule the union is ligamentous, and that we are not authorised to attempt, by extreme measures, to produce what experience has proved exceptional—contending that there is but little, if any difference, as regards the functions of the limb, whether the ligament uniting the two fragments be a quarter or half an inch long. He says that the most important consideration in the treatment of this fracture is position—the leg extended, and the thigh flexed upon the trunk. In the case under consideration, the limb was placed in a wire gutter, and the superior fragment brought down by means of a bandage attached.



The case of fracture of the olecranon process, is being treated by a straight splint and the figure of eight bandage.

Since writing the above, I have had an opportunity of examining an extremely rare lesion, which, as I am in the way of speaking of rare accidents, I will record here: It was a dislocation forwards, of the superior extremity of the middle piece of the sternum, in a man between forty and fifty years of age. It has been contended by some surgeons, that this accident is not observed except in young subjects, and, as the result of a direct force; this case, however, is in direct opposition to such an opinion, as the subject has already passed the middle age; and from the history of the accident (the patient falling from the second story of a house, lighting on his feet, and breaking, at the same time, both legs), as well as the complete absence of contusion of the soft parts covering the sternum, there is not the least doubt but that it is the result of an indirect force. But, how shall we account for a dislocation of the sternum, by an indirect force? Shall we look upon the sternum in such cases, as a sort of second vertebral column, receiving a portion of the shock? Or, shall we account for the dislocation under such circumstances, by the chin coming in contact with the superior portion of the sternum, and thus transmitting the shock, as some have imagined? We can conceive of the possibility of the chin transmitting the shock, if the subject light upon the head, but must say, that it requires a stretch of the imagination to account for the accident in this way, where the subject lights upon his feet.

Yours, &c.,

W. F. WESTMORELAND.

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#### UNIVERSITY OF NASHVILLE.

We have received, and read with pleasure, mingled with regret, the address to the class of the University of Nashville, at the commencement of the present session, delivered by Prof. Lindsley. With pleasure, because it is a merited and interesting tribute to the memory of a noble member of our

profession ; and, with regret, that he should so soon have passed away.

Though, we had not the pleasure of a personal acquaintance with Prof. Porter, from all that we have been able to learn of him, we have no doubt the University of Nashville has sustained a serious loss in his death.

We understand that the present class in that institution, is a much larger one than the last, and with a continuance of increasing classes, it must, in a very short time, become the leading school (so far, at least, as the number of students in attendance, can make it so,) in the United States.

To the high destiny which seems to await the University of Nashville, we have no objection ; it is an institution, taken altogether, indeed, to which we look with pride and pleasure, more particularly as the result of Southern energy and talent, and as a demonstration of the fact, that Southern institutions can be made successful. It is very true—as connected with another enterprise, on account of what we consider an illiberal and ungenerous course, unworthy of those who should control the halls of science and learning—we *owe* them no good will ; and if we were disposed to be revengeful, (taking into consideration the arrogant and selfish spirit, which has been manifested towards the Atlanta Medical College,) we might remark, that “Pride cometh before a fall ;” we prefer, however, to indulge a different mood, and to predict good rather than evil ; to which, however, we must confess we are prompted in a good degree, by the feeling, that we have attained a position of security, and independence of their efforts to injure us, by which we are enabled to *afford* a forgiving spirit.

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#### PROSPECTUS OF THE NORTH CAROLINA JOURNAL OF MEDICINE AND SURGERY.

We have received the prospectus of a Journal, bearing the above title, from the Secretary of the North Carolina Medical Society, S. S. Satchwell, M. D., of Long Creek, New Hanover Co., North Carolina.

The new Journal is to be published under the auspices of the Society, and is proposed as an "adjunct in the advancement of Medical Science, and the improvement of the Medical Profession. To this end, it will seek to be a fit medium of expression to the regular physicians of this and other States, who may have written medical communications to make, interesting cases in practice to record, or facts to state of present value or for future reference."

As stated in the prospectus, "Among the thirty-one States of the Union, North Carolina stands almost alone, in having neither a Medical Journal nor Medical College," and we see no good reason why she should not have both; there is, doubtless, the ability in every particular, to sustain such enterprises, if the profession are only united in the purpose to do so. Our friend, the Secretary of the Society, proposing to establish the Journal, would be fully competent, we are sure, to conduct one of high order; and should it be the pleasure of the Society to select him for the post, we should welcome him to the fraternity with much pleasure.

The Secretary is authorised to receive subscribers' names, and we commend the movement, not only to the profession of North Carolina, but the whole Southern country—beyond Virginia or Maryland, at farthest, Southern Journals cannot look for patronage; and from the force of uncontrollable circumstances, compelled to rely upon our own *section* for support, the appeal should not be in vain.

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INVASION OF THE TOE-NAIL.—A new plan for the treatment of this painful affection is thus given by Mr. Lovegrove: "The nail, which is usually very thick on the great toe, was scraped moderately thin with a piece of glass, and then the whole surface covered with a good coating of nitrate of silver; which was accomplished by rubbing the stick of silver carefully over the whole nail, moistened with a little water, after which a linseed-meal poultice (hot) was applied, and the next morning nearly the whole of the nail was separated from the flesh, and another milder application divided it entirely. The nail was then removed without the least pain, and the patient assured me she had not suffered at all, during the whole operation. In less than a fortnight after the operation was completed, the patient wore her usual boots with comfort, and before leaving Brighton a new nail was rapidly growing."—*London Lancet*.

Dr. Arnott, of London, has written several papers of late, to show that the mortality following operations, has greatly increased since the introduction of anæsthetics. The agitation of this subject has led to careful statistical enquiry, and we have now a promise of the results in the principal hospitals of the Metropolis, for the past eight or nine years. We await the publication of these with anxiety. Dr. Snow, who from the first has been extensively engaged in the administration of chloroform and ether, has recently been using the vapor of amylene, which is reported to have caused an entire absence of pain. It produced some mental excitement and muscular rigidity in two of the cases. Amylene is made by distilling fusel oil with chloride of zinc. Its vapor is less pungent than that of chloroform.—*Western Lancet*.

### METEOROLOGICAL OBSERVATIONS FOR FEBRUARY, 1857, AT ATLANTA, GA.

| FEBRUARY. | TEMPERATURE. |         |         | WIND. | REMARKS.                    |
|-----------|--------------|---------|---------|-------|-----------------------------|
|           | 7 A. M.      | 2 P. M. | 7 P. M. |       |                             |
| 1         | 85           | 54      | 40      | N. W. | Fair.                       |
| 2         | 84           | 48      | 40      | W.    | Fair.                       |
| 3         | 88           | 60      | 54      | S. E. | Fair.                       |
| 4         | 40           | 66      | 50      | N. E. | Fair.                       |
| 5         | 52           | 68      | 56      | S.    | Cloudy.                     |
| 6         | 52           | 67      | 59      | S. W. | Cloudy.                     |
| 7         | 56           | 75      | 59      | W.    | Hazy.                       |
| 8         | 50           | 44      | 30      | S. W. | Cloudy—Rain $\frac{1}{2}$ . |
| 9         | 22           | 46      | 35      | N. W. | Fair.                       |
| 10        | 24           | 46      | 32      | N. W. | Fair.                       |
| 11        | 26           | 40      | 36      | W.    | Fair.                       |
| 12        | 32           | 50      | 44      | S. E. | Light clouds—Drizzily.      |
| 13        | 40           | 54      | 48      | S. E. | Hazy.                       |
| 14        | 46           | 62      | 52      | S.    | Hazy.                       |
| 15        | 48           | 65      | 60      | S. W. | Fair.                       |
| 16        | 54           | 68      | 58      | S. W. | Rain 1-16.                  |
| 17        | 54           | 70      | 64      | W.    | Fair.                       |
| 18        | 50           | 76      | 52      | N. E. | Fair.                       |
| 19        | 52           | 84      | 62      | S. W. | Fair.                       |
| 20        | 56           | 78      | 60      | S.    | Hazy.                       |
| 21        | 58           | 66      | 58      | S.    | Hazy.                       |
| 22        | 40           | 66      | 52      | W.    | Hazy.                       |
| 23        | 40           | 70      | 56      | W.    | Fair.                       |
| 24        | 53           | 74      | 62      | S. W. | Hazy.                       |
| 25        | 62           | 76      | 62      | W.    | Hazy.                       |
| 26        | 52           | 76      | 56      | W.    | Fair.                       |
| 27        | 54           | 80      | 64      | W.    | Fair.                       |
| 28        | 52           | 66      | 46      | W.    | Drizzily.                   |

Furnished by

J. G. WESTMORELAND, M. D.

# A T L A N T A

## Medical and Surgical Journal.

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[No. 8

### ORIGINAL COMMUNICATIONS.

#### ARTICLE I.

##### FOREIGN CORRESPONDENCE.

By W. F. WESTMORELAND, M. D., Professor of the Principles and Practice of Surgery in the Atlanta Medical College.

PARIS, JANUARY 10TH, 1857.

*Dear Doctor*—Much has been said, and justly so, in praise of the arrangement of the hospitals of Paris. As exhibiting the progress of science, and affording advantages to the medical student, they are, perhaps, the most perfect of any in Europe; the attending physician and student having many important privileges ceded them here, that are denied them in other cities; still, they are, in some particulars, defective. One defect, and the only one that I shall notice here, is the absence of any special wards or hospital for the treatment of diseases of the eye; patients laboring under this important class of disease being distributed indiscriminately in the various surgical wards. For almost every other important class of disease, there are certain wards; and for some, certain hospitals are set apart for their treatment; such wards being under the control of physicians or surgeons devoting themselves entirely to certain classes of affections, each receiving only such cases as come directly under their speciality, as the venereal hospital, the scrofulous department at the Hôpital des Enfants Malades; diseases of the skin at St. Louis; wards for disease of the

bladder and urethra, under the care of M. Civiale, at Neker, &c., &c. Why it is that this defect, preventing the connection of oculists with the hospitals, and thus throwing them upon their own resources for improvement, has been so long overlooked, I am not able to say; one thing, however, is certain, that it cannot be for the want of importance of this class of disease.

This defect, so far as regards the medical student, is, to a great extent, obviated by the establishment in the city of several eye clinics upon private resources, at which is congregated three or four times a week a number of patients, the student having, by paying a few francs per month, every facility of studying the diseases of this important organ. It is of these clinics, or rather that of M. Desmorres, that I wish more particularly to speak in this letter.

M. Desmorres is certainly one of the first oculists in France, and has done as much for this particular department of science as any surgeon of the present day. His clinic, to which I have been attached ever since my arrival in Paris, is, without doubt, the best in the city, he receiving more patients, perhaps, than all the others combined—the number examined and prescribed for upon the days of the clinic, frequently amounting to between two and three hundred, a sufficient number, certainly, to experiment upon a large scale.

For the past several years, M. Desmorres has been devoting considerable attention to the treatment of lachrymal fistula, has experimented extensively, with a view of determining the value of the various plans of treatment proposed for the cure of this rebellious affection. The result of these experiments, and they have been upon an extensive scale, has been such as to condemn the, at present, most popular method, which consists in dilating the lachrymal duct by means of a stylet. He remarked a few days ago, in a lecture—and since in a private interview, told me the same—that of the hundreds that he had treated by this method, he knew of but *one* case where the cure had been radical. He said that it was possible that there were other cases that he had lost sight of, but that if any existed, they must certainly be very rare, as it was his misfortune to see them return at from a few months to a year after

the treatment was discontinued. He has varied the plan of dilating the duct—has used stylets of various forms and substances, continuing the treatment from eight months to a year, and always with the same unfavorable result.

He contends that those who have had such happy results from this plan of treatment, have mistaken a temporary relief for a radical cure—a relief which, as a general rule, does not last so long as the treatment of which it is the result—the duct, in a few months after the treatment is discontinued, presenting the same obstruction as before its commencement. He renounces, then, this plan of treatment as a means of radical cure, resorting to it when, from some circumstance connected with the patient, it is thought best to attempt only temporary relief.

The method of permanent dilatation, by means of the canula of Dupuytren, he considers also objectionable from the numerous inconveniences with which it is attended, there arising, sooner or later, accidents which make it necessary to extract the canula. In some cases, the canula, a day or two after the operation, is displaced, intervening with the cicatrization of the incision for its introduction, in a few cases, this tendency persisting to such an extent as to prevent the success of the operation. In other cases, the canula descends, passing through the canal, and falling into the nasal fossa, the pharynx or the larynx; or, as in a case operated on by M. Velpeau, passing through the palatine processes of the superior maxillary bone, and falling into the mouth. Abscesses at the internal angle of the eye, calling for the prompt removal of the canula, are not unfrequent.

The above are some of the accidents which may arise at from a few days, to a few weeks after the introduction of the tube. Later, the canula may become obstructed by a calcareous deposit, thus exciting an inflammation of the parts, which continues until the foreign body is removed, or as is more frequent, the tube is obstructed by a sort of hypertrophy of the mucous membrane of the sac and duct, which covers entirely the superior extremity of the canula, and thus preventing the passage of the lachrymal fluid. But few surgeons of the present day are partisans of this method of operating.

Several other operations have been proposed and practiced, as the perforation of the os unguis, by Woolhouse, the process of M. Langier, in which he penetrates the maxillary sinus with a trocar, the tear reaching the nasal fossa by dropping through this sinus; but, as it is not my purpose here to discuss the various plans of treatment, but rather to give that usually resorted to by M. Desmorres, I shall let them pass for the present. M. Desmorres' favorite method consists in the complete obliteration of the lachrymal sac, either with the chloride of zinc or the actual cautery.

But, if the lachrymal sac is destroyed, what will be demanded by the adversaries of this plan of treatment? what will become of the tears? Or, as I was asked by a distinguished surgeon of the United States, when speaking of this operation, if I regarded the lachrymal sac and duct of so little importance, as to consider it rational to council their destruction? In answer to the latter, it might be asked, for example, if any one doubts the importance of one of the inferior extremities; and again, if any one, for a moment, doubts the propriety, under quite a variety of circumstances, of sacrificing this important member? The sac, as the leg, when sacrificed is diseased, and to such an extent as to interfere with its proper functions—the surgeon, in either case, interfering with the hope of placing the patient in a more comfortable position. In answer to the first, as to what is to become of the tears, it is necessary, first, to determine their origin; secondly, to know if they are secreted continuously; and thirdly, what is the part the lachrymal duct performs in their excretion. To discuss, as I would like, these physiological points, would require more time and space than I can possibly devote to the subject; I shall then content myself for the present by giving, in a very few words, the views of M. Desmorres, with some of the facts in support of his views.

He contends that the lachrymal gland is not the only source of the tears—that the experiments of Magendie and Martini, upon animals, in which they extirpated the lachrymal gland, are in support of this opinion; they find the eye, in each case, equally well lubricated after, as before the extirpation—the secretion of the tears, to all appearance, being equally abun-



dant. The extirpation of the lachrymal gland in the human subject has, so far, given the same result. In this extirpation by Harpin, Daviel, O'Beirne, Lawrence, de Gracfe, Bernard, Laugenbeck, and others, no case has been observed in which the eye presented the least dryness. In the case reported by Harpin, if the conjunctiva, after the extirpation, was touched with the end of a probe moistened with the tincture of opium, the eye would instantly fill with tears, and to such an extent as to overflow. It is evident then, from the above facts, that the lachrymal gland plays only a secondary part in the secretion of the tears; the greater part being secreted by the vessels of the conjunctiva. As an evidence of their secretion by the conjunctiva, if we touch that membrane so as to remove the fluid which protects it, we will instantly see appear upon its surface, thus touched, small drops of liquid, which is readily recognized as the tears.

Another evidence, if any other is wanting, in support of the part the conjunctiva has in the production of the tears, is, that in the affections of the gland, and as we have seen, even in its complete extirpation, there never results *xérosis*, a dryness so dangerous to this organ, and which frequently has place when, from a continuous inflammation, from whatever cause, the conjunctiva presents an extensive cicatrix.

Does the lachrymal gland secrete constantly? M. Desmorres contends that the structure of this gland is the same as the salivary glands, and, like them, secretes periodically, that is, when the surfaces upon which they pour their contents are irritated; regarding the lachrymal gland as a sort of reserve, destined to furnish a flow of liquid sufficient when the conjunctiva is irritated, to rid it of any foreign body that might have lodged upon its surface. That, ordinarily, when there is no irritation about the eye, the gland rests inert, leaving the conjunctiva to furnish alone the necessary amount of fluid to lubricate the eye. M. Hyrtl, of Vienna, advances the same views in regard to the functions of this gland.

It rests alone, now, of the three propositions, to determine the part the sac and duct has in the excretion of the tears. Under ordinary circumstances—that is, when there is no irritation about the eye—the mucous membrane being lubricated

by secretions from its own surface, the fluid thus secreted passes off by evaporation. MM. Desmorres and Hyrtl have observed, that, in this normal condition of the parts, there is no fluid to be found, either in the puncta lachrymalia or in the lachrymal canals. The strongest evidence, however, of the evaporation, under ordinary circumstances, of the liquid lubricating the conjunctiva, is the complete absence of epiphora, under the same circumstances, after the complete obliteration of the lachrymal sac. It is then only during a hypersecretion of the tears, from various causes, as a bleak wind, dust, foreign bodies, and many other circumstances which tend to irritate and inflame the conjunctiva or other tissues of the eye, that the lachrymal canals serve to conduct the lachrymal fluid. One of the most prominent symptoms of an obstruction of the lachrymal duct is epiphora. This would appear, without reflection, to be in opposition to the above deductions, and is frequently urged by those opposed to the destruction of the lachrymal sac. As we have seen above, and as all admit, the least irritation about the eye induces a hypersecretion of the lachrymal fluid—this secretion being in proportion to the amount of irritation. In an obstruction of the lachrymal duct, we have all the conditions necessary to induce this hypersecretion; as from the first distention of the sac there is more or less irritation which increases with the obstruction, and, finally, in quite a number of cases, resulting in an abscess of the sac. Epiphora, then, so constant in this lesion, is not so much from the obstruction preventing the passage of the tears, as their increased secretion induced by the irritation of the parts. All know how frequent it is to see the eye overflow with tears from the least irritation, as a bleak wind, dust, &c., even when the lachrymal apparatus is in a normal condition. The proposition for which M. Desmorres contends, is the removal, definitively, of the irritation and inflammation of the sac by its complete obliteration. He has, within the past ten years, adopted this method of treating lachrymal fistula in quite a number of cases, and has demonstrated that the increased flow of tears ceases with the removal of the irritation, the patient being cured with the inconvenience of a slight overflow of tears when, from any circumstance, the conjunctiva is excited.

This method is not original with M. Desmorres; it was proposed and practiced by Angelo Nannoni, of Florence, as far back as the middle of the last century. The ancients, too, treated lachrymal fistula as they did any other fistulous opening by the cautery, without a correct knowledge, however, of the lachrymal apparatus.

In the obliteration of the sac by the actual cautery, the sac is freely opened by an incision near an inch in length, commencing a few lines above the tendon of the orbicularis, freely dividing the tendon so as to reach the superior portion of the sac; the incision should be, to some extent, curved, the concavity looking towards the eye. After the hemorrhage is arrested, the incision is dilated by means of two hooks, the eye protected by a compress or piece of paste-board, and the cautery freely applied to the whole extent of the sac. Ice or cold water, by means of a bit of cloth or lint, should be constantly applied for the first twenty-four hours after the operation.

In the obliteration of the sac, by means of caustics, of which M. Desmorres gives preference to the chloride of zinc, the incision need not be so extensive, and may be commenced immediately below the tendon of the orbicularis. The caustic, if the chloride of zinc be used, may be introduced by means of a goose quill or any other tube, care being taken that the caustic does not come in contact with the edges of the incision. The same precautions, to prevent a too violent grade of inflammation, should be observed, as we have above suggested in the process by the actual cautery. M. Desmorres insists upon the importance of the obliteration of the superior portion of the sac, for reasons that are readily understood.

Much might be said in regard to the particular indications, giving preference to one or the other methods of obliterating the sac, but as I have already extended this letter much longer than I expected, I will, for the present, close.

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PARIS, JANUARY 20TH, 1857.

In my last letter, I proposed to give you the treatment of some of the more important diseases of the eye, as practiced at the clinic of M. Desmorres; but, if I am not mistaken, I,

in that letter, discussed, to the exclusion of everything else, obstructions of the lachrymal duct. I shall, then, in this, continue my notice of this clinic, commencing with that very common, but important, lesion, cataract.

All have long since renounced the possibility of removing the opacity of the crystalline lens by any medication, either local or general, agreeing that, sooner or later, an operation will be demanded; but, when we come to discuss the manner of operating, we do not find such harmony—every surgeon having his favorite method, which he strenuously contends has its advantages. Of the various operations proposed, we may make two great divisions: one including the extraction of the lens by whatever procedure; the other embracing the various operations in which the lens is left either in the posterior or the anterior chamber. A review of the various methods embraced in these two grand divisions would not be without interest, but as it is my object here to speak alone of those practiced at the clinic of M. Desmorres, I shall proceed at once to their discussion.

M. Desmorres is a strenuous advocate of the extraction of the lens, adopting this method under almost all circumstances. The operation by extraction has been usually restricted to uncomplicated cases of hard cataract. M. Desmorres goes for the extraction of soft cataract as well as that variety of hard cataract in which there are adhesions between the capsule and the iris. His operations by extraction in soft cataract, so far as I have seen, have been more satisfactory than in the most favorable cases of hard cataract. He has three distinct operations for the extraction of the lens: first, the operation for the extraction of uncomplicated hard cataract, which is the usual operation for extraction; secondly, an operation for the extraction of soft cataract; and, thirdly, a method differing from the other two, which he practices for the extraction of hard cataract, complicated with adhesions between the capsule of the lens and the iris, an accident so frequent in chronic iritis.

The first, or the operation which he proposes in cases to which the method by extraction has been usually restricted, differs from the ordinary method for extraction only in the *manuel opératoire*. Thus, instead of completing the section of

the cornea with the cataract knife, as is usual, he withdraws the knife before the section is complete—leaving a small point at the superior portion of the flap still in tact. After waiting a few minutes, that the muscles of the globe of the eye may cease to contract with such force, he completes the section with a very delicate probe pointed knife. He, as the majority of surgeons who perform this operation, insists upon the advantages of the superior over the inferior section—contending that in the inferior section the incision in the cornea is constantly bathed in the secretions of the eye, which necessarily accumulate at this point, interfering with the process of adhesion, and in a number of cases producing a separation of the wound. Again, in the inferior section, the least motion of the lids tend to displace the flap, while in the superior section, if the eye is closed, the superior lid tends to keep the flap in place. In two cases I have seen M. Desmorres, in this operation, extend the flap upon the conjunctiva, extracting the lens without completing the section.

His operation for the extraction of soft cataract, which he terms "*extraction linéaire*," consists in a section of the cornea near the sclerotic with a lancet-shaped knife, as in the operation for artificial pupil; after the section, which is a straight incision, consequently the name *linéaire*, a delicate hook is introduced into the anterior chamber, and the anterior surface of the capsule ruptured in several places. If a small curette is now introduced into the incision, or is passed against the external lip, so as to separate its edges, at the same time that slight pressure is made upon the globe of the eye, the lens, if sufficiently soft, instantly escapes through the incision. If the lens be less soft, the consistence of jelly, for example, it may be necessary to introduce the curette for its extraction. M. Desmorres insists upon the importance of not rupturing the posterior surface of the capsule, contending that if there is the least wound of the posterior surface of the capsule, the vitreous humor instantly projects, displacing the softer lens behind the iris, and thus preventing the possibility of its extraction. The most beautiful results that I have ever witnessed from any operation for cataract, have been from this method. I have seen patients leave the clinic at from twenty-four to

forty-eight hours after the operation, with complete union of the cornea, they able to see their way.

When there are, from any cause, firm adhesions between the capsule and iris, the pupil permanently fixed, it is evident that the lens cannot be extracted in the usual way; neither can an operation with the needles be performed with any prospect of success. In such cases, M. Desmorres proposes a double operation—artificial pupil with extraction.

His usual plan of performing this operation is to proceed as in artificial pupil, in fact, performing first the operation for artificial pupil by *déchinement*, making the incision in the cornea, perhaps, more extensive than is usual in the operation, and after, to extract the opaque lens through the opening thus made in the iris. The operation is performed as follows: With a lancet-shaped knife, make an incision in the cornea as near the insertion of this membrane into the sclerotic as is convenient; the section made, with a delicate pair of curved forceps, introduced through the incision, as large a portion of the iris as is possible, is seized near the pupil, and, by a quick movement, is brought out through the incision in the cornea and clipped off with a pair of scissors. The iris in this operation is torn, the rupture of the membrane following the direction of the fibres converging towards the pupil, thus leaving a triangular opening, the apex of which is directed towards the pupil. Through the opening thus made in the cornea and iris, a small curette is introduced behind the lens, and after breaking up the remaining adhesions, the lens, before its extraction, is broken into several pieces, if possible, by pressing it against the cornea.

I have seen this operation performed in two cases, and in both with success.

I should have mentioned, when speaking of the usual operation for hard cataract, that M. Desmorres never dilates the pupil in the operation, concluding that the lens is readily extracted without its dilatation, and with less danger of the escape of the vitreous humor. Neither does he *prepare* the patient, as its termed, for any operation, by a system of dieting, rest, purgation, &c., as is so frequently practiced by surgeons. Says that the best time to operate is when the patient

is in the most perfect state of health—that by interfering with the general habits of the patient by diet and repose, or by the administration of a purgative, we derange, to a greater or less extent, the general health, and, in a number of cases, favor the development of accidents which we attempt to prevent. I have seen him several times perform the operation for cataract by extraction, upon patients who had but an hour or two before left their usual occupation, and without accident.

Since the discovery of the *ophthalmoscope*, by Halmholtz, in 1851, M. Desmorres has been constantly engaged in the study of the before obscure diseases of the internal eye by means of this instrument. By constant application and improvements in the ophthalmoscope, he has arrived at such perfection, that he examines with the same facility, and makes his diagnosis with the same precision of diseases of the internal eye, as the choroid membrane, retina, *papilla* of the optic nerve, &c., &c., as the disease of the external membranes. To present the many advantages that has resulted from this discovery would require many pages. It has done as much and perhaps will do more for diseases of the internal eye, than the great discovery of Laennec and Avenbrugger has done for diseases of the chest. M. Desmorres strikes from his nosology that elastic word, *amaurosis*, which has for centuries served to cover the ignorance of oculists of the many lesions of which it is only a symptom.

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## ARTICLE II.

*Scarlet Fever.* By REUBEN SEARCY, M. D., Tuscaloosa, Ala.

In 1853, Scarlet Fever broke out in the county and city of Tuscaloosa, as an epidemic, destroying many children. I encountered a number of cases, and lost, probably, about one-third of my patients—nearly all of the malignant ones. At that time, the more violent the attack, the more active was the treatment. Bleeding, emetics, active cathartics, blistering the neck, &c., were resorted to. The disease and the treatment, both prostrating the patient, often brought him to a speedy end.

The theory, then, was, that the more inflammatory the attack was, it must be met by a corresponding depletory and antiphlogistic treatment. The theory was very plausible; but it carried death in its sequel.

We consulted authorities, and we consulted physicians abroad: we could obtain no better light. After a while, we saw that a milder course of treatment succeeded better. We soon abandoned blistering over the throat and glands of the neck, when we had the mortification of witnessing gangrene and sloughing ensuing.

We now have adopted a theory and practice, obtained from reading and observation, that has proved so successful, that we deem it expedient to give them publicity.

The disease may be atmospherical, dropping down in a community without our knowing whence it comes; but we know that it is contagious, and very probably, that in those places where it is supposed to break out atmospherically, it may have been communicated by a grown person, who has contracted the disease, and carried it into a neighborhood, he having only the Scarlet fever sore throat, without knowing it, and supposing he had a very sore throat from a bad cold. In this way, I have known it introduced into families by adults.

May 29th, 1855. I visited a young man just returned from Mobile—he having a very sore throat and some fever, which lasted some four or five days, and he convalesced. I supposed at the time, as he had been very much exposed night and day on the river, that his attack was attributable to his exposure, and as he had no eruption on his skin, I did not suspect Scarlet fever. He was sick in a well ventilated upstairs room, and his two grown sisters were his nurses: all the children were kept away, because he could not bear any noise on account of great pain in his head. About twelve or fourteen days after, the two sisters were taken with decided Scarlet fever, and from these two cases, some of the children down stairs contracted the disease in ten or twelve days after, and it went through the family. Again. In December, 1856, Mr. C. M. F., who resides out of the city, had a servant girl at work in the city. She was taken with a very sore throat, and went home, and was treated for quinsey by her mistress, and ten or



twelve days after, the whole family of children in the same room, were taken with Scarlet fever. I could mention other cases, if necessary, of adults having only the sore throat, and going about mixing with the people, and diffusing the disease with their poisonous breath. In this way it may be introduced into communities, without their knowing the disease was near them, and who knows but that it is propagated from place to place in this way, when it is supposed to originate spontaneously?

I believe the principal seat of the disease is in the Tonsils, and that the eruption is one of the marked signs of the disease. You can see the Tonsils enlarged two or three days before there is any development of fever, and throwing the child's head back, you will discover that the enlarged Tonsils will show externally, near the angle of the jaws, in an elongated swelling of two or three inches in length on both sides, which is not apt to be the case in colds.

In the beginning of the attack, if the bowels are constipated, I give a small dose of castor oil. If they are in a natural condition, I give no aperient. I endeavor to keep up a diaphoresis, with equal parts of sweet spirits of Nitre and Paregoric and an eighth of Cox's hive syrup mixed, and given: To a child one year old, ten or twelve drops; and five years old, half of a tea-spoon full, every two or three hours, and if the child becomes drowsy from the effects of the paregoric, give less or at longer intervals, and let the child drink some sage or balm teas, not very strong. Externally, have the patient greased from head to foot, very often, with a fat piece of bacon. The lard in the bacon keeps the skin soft, and the salt that is in solution in the grease, proves sufficiently stimulating to the capillaries, to excite perspiration. The scarf skin that is parched and burnt by the fever, and killed by the eruption, does not let the perspiration sufficiently through the pores, unless softened by some kind of oil. The rubbing on of the grease has a very quieting effect. I have a very fat piece of bacon about half of an inch thick, and as wide as the neck is long, tacked on to a piece of cloth and worn as a cravat night and day, renewing it once a day.

I cauterized the tonsils, when very sore or ulcerated, with a

solution of the nitrate of silver, of from ten to forty grains, according to the age of the person, about twice a day. I wish my patients to drink very often of corn meal gruel made thin and seasoned only with a little salt. They may eat mush and molasses, bread, crackers, &c., and drink tea and coffee, but no milk, except the child, its mother's milk. I wish to keep and sustain all the strength I can, in my patients. If the throat becomes so swollen that the child cannot swallow, sustain it with gruel injections, administered every five or six hours. I sustained a little girl three days in this way, the swelling then subsiding, she swallowed and got well.

The disease may be rendered entirely harmless, if a proper hygienic course be observed. When a case is introduced into a family, put every child and young person, and mother who has a child at the breast, upon a strickly vegetable diet, as much so as if you were wishing to prepare them for the inoculation of the Small pox. Every case that takes the disease when thus prepared, will be mild, and in many you will only discover a slight swelling of both Tonsils, which is as likely to prevent their having the disease again, as if the eruption was fully out; and when a child has had this swelling, it is no longer necessary to diet more. But if any child has not had the swelling, continue the dieting for two weeks after the last case of Scarlet fever.

I have never seen a bad case when the system was thus prepared, and in my practice, the first case is the one I dread the most. I do not want to weaken any of the children by dieting; let them eat enough of a vegetable and milk diet to keep up their strength.

It is well known to Surgeons and Physicians, that the inflammatory symptoms run much higher in those cases, when the blood is made from meat or grease, than when the system is properly prepared, and as Scarlet fever is highly inflammatory in its character, hence the importance of preparing the system for its advent, in all young persons exposed to the contagion. Old persons rarely have more than the Scarlet fever sore throat.

## ARTICLE III.

*Essay.* By THOS. S. DENNY, M. D., read before the Atlanta Medical Society, and published by that body.

*Gentlemen of the Society:*—It has been in the midst of many embarrassments, that I have been compelled to prepare an Essay to be read before your body. My humble effort will, I trust, be treated with leniency.

To adopt Dr. Wilson's theory, contained in an Essay published in our Journal for May, 1856, we would be doing ourselves a great injustice; burdening ourselves with much more responsibility than we ought, rightfully to assume.

The number of Empirics in the Profession, i. e., of those who became so after being clothed with the privileges attached to graduation, is very small, compared with the number who are permitted by legal authority, or rather, not restrained by legal enactments, from putting forth their nostrums, who never even read a page of medicine in their lives, though our Profession is now in the very act of providing a remedy for the former evil, by requiring the expulsion from our ranks, of those who will violate our yet imperfect code. The great success to be attributed to Empirics, in the spread of their so called *remedies*, and of their consequent accumulation of wealth, is to be explained by the credulity of human nature.

Dr. Brown, in his "Observations," says, it is the bold, unscrupulous assertion of infallibility of the Charlatan, which secures his success.

With reference to his theory of incompetency, I may be permitted to say that Colleges, and not the irregular members of the Profession, or of Empirics, proper, are the best judges of competency, and the less we have to do, with the latter especially, the better. I, for one, am willing to leave them to their notoriety.

It is the public mind which we must endeavor to enlighten, but only to such a degree as to show the vast superiority of the regular medical profession, over the miserable pretenders who infest the world by thousands, for the sole purpose of wresting from the ignorant the hard earned reward of their industry, and even from the wealthy and frequently equally

ignorant class, the sanction of their influence to their artfully contrived impositions.

But, another subject, of, I trust, more interest, I will endeavor to illustrate, at least according to my own humble view of it, the nature of disease in the same organ.

I cannot regard disease as so infinitely diversified in its nature as many of our profession are disposed to think. One of the collateral arguments I would advance in support of the opinion, is the utter discontinuance of such a host of remedial agents, as were once regarded as specifics in disease, and indispensable to its eradication. We know now that Hippocrates, Galen, even Cullen—may I not say Rush—would, could they have lived to the present era, be ready to ridicule the use of many of their favorite remedies, and would smile upon our efforts to advance the science of medicine by its simplification.

Phthisis Pulmonalis, Consumption proper, is only marked being accompanied, or not, by biliary derangement. Its variations otherwise, are very few. There is no essential difference in fevers, it is only in the seat of local affection, and in its manifestations, that they are distinguished. "Fire," says Dr. Rush, "is a unit, whether produced by heat, friction, electricity, or any other cause." The treatment although varied, does not very materially differ; it is not more than subject to the general principles of medicine.

The theory that there is a great identity in the nature of disease, (at least in diseases of the same organ,) is not very ancient, for even the great, but unpractical Dr. Good has been, and is still, more and more criticized, and his "class, order, genius, species, and variety" of disease, is read, as Dr. Samuel Johnson declares he "had read Miltons Paradise Lost, more as a duty than a pleasure."

The French School of Medicine has had a great deal to do with the perpetuation of *variety* of disease, in its peculiar sense, and has so multiplied the distinctions, that the real differences have become somewhat obscured. The ideas of that class of Theorists and Practitioners have become confused, in matters of science as well as politics, and both they, and consequently we, are frequently at a loss to embrace their ideas. I am willing to award to them great earnestness, and even

more than they claim, great enthusiasm, but most respectfully decline to give any but a very limited sanction to many of their views. Indeed, the necessary retractions, which their followers, (imitators at least,) are frequently compelled to make, is evidence sufficient to point out that imperfection is attached to much that they claim as original, and especially adapted to disease.

The idea which I wish to elucidate is, that disorders of the same organs are, from the very nature of things, necessarily similar in kind, though different in degree. Inflammation of the liver is attended with a suppression of the secretion, natural to that organ, and a total want of action of the same viscus is accompanied by the same condition; a total suppression of the secretion, natural to any of the internal secretory organs, is frequently, the immediate precursor of the higher state of inflammation, and more—the same remedies are employed to restore the natural action of the organ in both cases.

Analogy is pertinent to our subject. Does it seem natural that the human family should, for centuries, be subject to suffering, while those whose peculiar office it is to afford relief, are groping in the dark, after imagined differences, narrowed down to a hair's breadth, into infinite distinctions, in diseases of the same organ. The food of man is divided into two *great* classes, and his health is affected but by a limited variation in temperature of the atmosphere. Certain classes of disease prevail *principally* in certain portions of the globe; and although they are somewhat modified in intensity, their peculiar nature is the same.

Take the diseases of hot and cold climates, do they not affect different organs respectively, subject only to the peculiarities of the constitution of the individual? Consumption is generally regarded as aggravated and fatal in cold latitudes, and soothed in warm, southern climes. Bilious affections, and cutaneous eruptions prevail in warm regions—the first from direct action of heat, the latter from impurities of the blood, caused by inappropriate dietetic indulgences.

In the language of an original, chaste, and thoughtful writer,\* upon a subject of a kindred nature, "There is certainly an original difference in the conditions of men, and of

\* Gregory's Comparative Views, p. 123.

nations, but this is not so great as at first view it seems to be. Human nature consists of the same principles every where. In some people, one principle is naturally stronger than it is in others, but exercise and proper culture will do much to supply the deficiency. The inhabitants of cold climates having less natural warmth, and sensibility of heat, enter but very faintly into those refinements of the social principle, in which men of a different temper delight. But, if such refinements are capable of affording to the mind innocent and substantial pleasure, it should be the business of Philosophy to search into the proper methods of cultivating and improving them."

It will readily be perceived that the objections which we have, are against the infinite modifications of the same disease, which are attempted to be elaborated, and refined, until imagination is unable to follow the intricate labyrinth, and becomes confused in following chimeras which would require such an unlimited number of remedial agents, as to exceed the bounds of the *Materia Medica*, and has doubtless driven many to the one remedy system—one cure for all diseases—the very essence of Empiricism.

Professor Dickson, in his *Elements of Medicine*, speaking of *classes* of fever, says: "I do not object to the nicest diagnosis, the drawing of the most delicate lines of distinctions. I applaud rather all attempts in this way, and study with pleasure, as well as profit, the *Essays of Copland, Gerhard, Jackson, Ware and Jenner*. But, even in these ingenious and useful efforts at analysis, these vivid delineations of differences, we are perpetually presented with striking analogies, striking resemblances, the intrusion of characteristic symptoms, where they were not looked for, and their absence, where they were confidently expected. The *Synocha and Synochus*, the *typhus* and *typhoid*, run together, inexplicably. Partisan advocates of special doctrines often find no reply available, but a denial of some alledged fact as a suggestion either of error, or carelessness in observation. The impartial judge, the earnest student, is not satisfied, however, with this mode of conducting the investigation; and in summing up for the purpose of arriving at the truth, feels himself under the necessity of regarding with equal eye, and weighing with the same scales the statements on both sides of the question, accepting no 'fore-ne conclusion.'"

In our humble opinion, it would require but a few more years of life to the above candid author, to satisfy him as to the still greater analogy of fevers in general. He is now in the position of the celebrated Dr. Watts, who, not long before his death, gave up the divinity of the third person in the God-head, as preparatory to his unconditional acceptance of Unitarianism; but whose life was not spared to make the acknowledgment.

That there is a judicious discrimination to be made between all forms of disease, we know, by daily experience, but it is certainly true, also, that imagination has been suffered to run riot over the field, precisely on account of the difficulty of making real distinctions, and satisfying the mind as to the exact nature of the disorder.

The introductory remarks of Dr. Paris to his *Pharmacologia*, familiar to every student of medicine, are also very appropriate to our present subject; but the refining process is adopted even by him, and carried to an excess, with intended illustrations, frequently devoid of applicability.

A reference to the *American Journal of Medical Sciences* for July, 1856, page 149, will still farther illustrate and confirm our views on this subject, and I shall consider myself more than fortunate, if I shall have been the means of causing one more thought upon a subject which is forcing itself daily more and more, upon our notice.

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#### ARTICLE IV.

EXTRACT FROM THE RECORDS OF THE ATLANTA MEDICAL SOCIETY.

E. HILLYER, M. D., Secretary.

*Report of a case of Hemorrhage from the Lungs in a child 3 years of age.* By HAYDEN COE, M. D.

On the 9th of February, 1857, about six o'clock in the evening, I was called to a child, M, aged three years.

Her mother informed me that she had had a bad cold for several days, and she thought she was threatened with croup, consequently, she had given her some Hives syrup, which was

repeated once after I saw her. Although I did not see any symptoms of croup, there was a little hoarseness and a slight cough, and a little fever, with thin white fur on the tongue. I was called early next morning to see her, and was informed that she had been very sick all night; had vomited several times, and had several operations from her bowels, and that she still was unable to retain any thing on her stomach, not even water. I found her restless, pulse small, quick, fever, thirst, tongue covered with red points, but little or no cough.

I applied a Clove plaster over the stomach, and prescribed alterative powders, Aqua Camphora, Lemonade and ice. This relieved the vomiting in the course of thirty-six hours, but the Diarrhœa continued, and I was unable to control it for six or seven days. She had a good deal of fever, and became very much prostrated, the pulse rapid and feeble; there was a little dry cough during this time, but so slight that it received no notice from me. At one time there seemed to be considerable irritation in the meninges of the brain, so much so the child seemed quite delirious. But a leech was applied to the temple, and small blisters behind her ears, which relieved her head. After the Diarrhœa was checked, the fever soon subsided, and about the twelfth day, the child, to all appearance, was convalescent. The patient, during the whole time, being sustained by water and milk, with flour cooked in it, and a little brandy added to it.

About this time, the submaxillary gland commenced swelling, and it suppurated in a few days and opened and discharged a large quantity of pus into the mouth.

I now ceased to visit my patient, thinking it unnecessary. In four or five days I was requested to prepare an expectorant for her, as her cough had become more troublesome, and that the glands still continued to discharge pus into the mouth. I prepared the expectorant but did not see her.

In a few days after this, I was again requested to visit my patient, as she was thought to be on the decline. To my surprise I found her much emaciated, pale, eyes faded, and was informed that the gland was still discharging freely, and with a troublesome cough. On examining the chest, the whole of the upper portion of the left lung appeared to be in a state of suppuration. In fact, the sounds were similar in every respect



to those which occur in the last stage of Phthisis Pulmonalis. This was on the 23d day of February, or about 25 or 26 days from the first attack. I applied a blister over the left lung, and put her on the use of Iodide of Potassium in Sarsaparilla Syrup, and Iron by Hydrogen.

From this treatment, there appeared to be some improvement. But on the 12th of February, about one o'clock at night, she was discovered to be bleeding from the lungs. She died in about 20 minutes after the hemorrhage was discovered.

With the exception of an attack of sore eyes in her infancy, which was manifestly scrofulous, she had very little the appearance of a child with a scrofulous constitution.

Her parents are healthy and stout in appearance, but her grand mother has had several attacks of hemorrhage from the lungs, although she has lived to be fifty or sixty years of age. Several of her father's relations have also died of Phthisis Pulmonalis.

The hemorrhage must have occurred from either a common abscess or softening of tubercles, which, owing to the chest not being more minutely examined in the earlier part of the disease, cannot perhaps, now be determined with certainty, as a post-mortem could not be had. But I am much inclined to believe it to be the result of softening of tubercles as there were very few symptoms of Pneumonia during the whole course of the disease. The apex of the lungs were most diseased; if it had been an abscess, it would have been most likely to have been situated in the base of the lungs. The suppuration was much too high for an abscess, unless it had been very large. I have but little doubt but that the tubercles existed previously; or at least a predisposition to deposit tubercles, and the great prostration produced by the Diarrhœa and fever, favored the degeneration, as frequently occurs after typhoid fever in colder climates.

If the disease is hereditary, I know no reason why tubercles may not be developed in a child as in the adult, although I have not seen a case where it was so manifest in a young child as in this case.

## SELECTIONS.

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From Medical & Surgical Reporter.

*"Moral Insanity."*

NEW YORK, January, 1857.

*Mr. Editor:* Moral insanity has, during the past month, been the great topic of discussion in and out of the profession, in this vicinity. It is talked of in the cars, it is discussed in the saloons, it is the staple on 'change, at the corners of the streets, in the halls of science, and in the courts of law. Since the last general election, nothing has so stirred the depths of society as this. The newspapers still ring with it; long leaders meet the eye, headed with those portentous words; the press groans under its influence; the shop windows are darkened with caricatures of it; tales of "fiction founded on fact," with this subject for the basis, fill long columns in the Sunday papers, and in staring capitals, a foot or more in length, it glares upon the walls and fences, in the form of advertisements, all because two legal gentlemen got their heads together to keep a notorious rascal out of State Prison, on the plea of "Moral Insanity." That was the talismanic word that was to break his shackles, and set him free to roam at large once more among the innocent money-changers of Wall Street.

A new form of mental disorder has become inaugurated into our text-books of insanity—*Monomania Huntingtoniensis*—in plain English, a propensity to write other people's names to promissory notes, and raise the money with them.

For about a year past an individual named Huntington has been preying with most consummate dexterity upon certain parties in Wall Street; raising by forged notes, money, to the extent, it is said, of about five millions of dollars, covering up his criminal acts, from time to time, by fresh forgeries of securities, and paying large percentages on the borrowed thousands. The money he spent sumptuously in riotous living, until, by a miscalculation of a month, as to the time when one of the alleged notes would fall due, the trouble burst, and that night our hero slept in the Tombs. So plain and abundant were the evidences of guilt, that no possible chance of escape remained to the criminal, but the desperate one which none but a lawyer of the boldest and most acute character would dare to raise, as a "plea in bar." Such astounding and long-continued criminalities could only have been conducted by a lunatic! To confess the whole, to magnify the crime, and then set up, before the jury, the plea of insanity, was their forlorn, their only hope. But what evidence of this, could they adduce? With a shrewdness more profound than the thought itself, they succeeded in inveigling into their plans two notable gentlemen of the medical profession, who, themselves above reproach or suspicion, were too easily led into the meshes prepared for them by these cunning gentlemen of the law. They visited the prisoner in his cell, conversed

with him an hour or so, and although entirely unacquainted with him before, came from the interview prepared to give their professional opinions to the jury and to the world, that the prisoner was a *monomaniac*, whose insanity showed itself in an uncontrollable propensity, to use the brokers' phrase, "to make paper." Alas! for professional wisdom! Who is a criminal, if Huntington is insane? Answer, shade of Pinel! Answer, Esquirol and Miss Dix!

Of the medical gentlemen upon whose names and opinions the defence relied for an acquittal, one has been a tower of strength heretofore among us in Surgery, and the other known as a professor of Obstetrics. How high the first stood in public estimation, you may judge from the fact that when his evidence went forth on the wings of the press, the next day, not only all money-dom, but all prison-dom, and all kinds of *dom*, were thrown into a ferment of astonishment; some fearing lest a great criminal should escape, others hoping that crime of every sort might now be committed with impunity. Fortunately for the stability of society, the jury exercised their common sense, and the honest portion of the community breathed free again, when they returned their verdict of "guilty."

There is a moral in this case which should be treasured by all, especially by medical men: never give an opinion on a subject upon which you have little or no experience, especially when a cunning lawyer has a point to gain thereby. It is very plain to all that had the suspicion of the criminal's insanity rested upon any substantial basis, his counsel should, and doubtless would, have called upon the prosecuting attorney to unite in an investigation of the case. Instead of this, the whole idea was kept *sub rosa*, until the defence opened, and then it burst upon the community in surprise, especially when the two medical men took the stand. Happily the moral storm which such plea, if successful, would have raised, was averted.

It is due to these medical men to say, that, in spite of the public clamor, they still maintain, as honest men should, irrespective of consequences, their conviction of the unsoundness of mind of the prisoner, and a candid listener to their reasons cannot but see that they have some ground for the opinion they gave in court. It is alleged that on both the father's and mother's side there have been and are cases of confirmed lunacy in the family, which, taken in connection with his extravagantly wild and reckless course of life, and his stolid indifference to the consequences, form the basis of their conclusions. They had, as medical men, nothing whatever to do with the course pursued by the prisoner's counsel, nor were they called upon to shape their opinions in accordance with the wishes of either prosecuting counsel or witnesses, and they reason now, that if their opinions had been the ground of an actual acquittal by the jury, blame could not attach to them, and society must provide for its own protection against further depredations of the same kind, but in what manner it is not for them to say. As medical men, it was their simple duty and privilege to give an opinion on the case, just as they would in any other. Whether that opinion is correct is a just matter of criticism, and there it must end.

#### THE ACADEMY OF MEDICINE

Has done itself the honor of raising, for the second time, to the office of President, that veteran in surgery, Dr. Valentine Mott. Now past the

allotted threescore and ten years, this unequalled master of the scalpel still bears as erect a figure, as healthful a countenance, a hand as steady, and an eye as strong as ever. He has lately tied the carotid artery for the forty-fourth time, in the living subject.

THE NEW YORK STATE MEDICAL SOCIETY

Will hold its first semi-centennial meeting in February, in Albany, when a *good time* is fully expected. I shall endeavor to be on hand, and give your readers some accounts of the deeds done in the body, as well as in the spirit.

Respectfully,

J. GOTHAM, Jr., M. D.

LETTER FROM BOSTON.

Boston, December, 1856.

There are two medical journals in this city. Why, then, send one's thoughts abroad for publication? Well, there are things that one cannot say at home, you know. One has to be particularly tender in talking of home matters before folks; and then one's own people don't like to have you tell their deeds to them, be they good or bad.

MEDICAL JOURNALS IN BOSTON.

Two journals? Yes, we have two. The *Boston Medical & Surgical Journal*, which for many years was under the editorial management of Dr. J. V. C. Smith, changed hands a year or two since, and although he remained nominally editor, it was well understood here that Drs. Minot and Morland were, and were to be, the sole editors. It was said here that Clapp, the owner, was afraid to turn off his former editor, because he threatened to publish another journal at a less price, if he did. His courage, however, was at last raised to the proper point, and the change was made. The result of the change was the "*Medical World*." I can't say how much of a hole it has made in the subscription list of its predecessor, but it is seldom seen on the tables of the profession in Boston. Homœopathy, hydropathy, everything which can be called collateral humbugs and collateral sciences, gets admission to its columns. Dr. Smith has the ability to edit a journal. He is an indefatigable industrious man; but having early in his professional career taken a public office, the usual fate of good-natured politicians awaited him. It is hard to be an independent politician. To be an independent medical editor and a politician at the same time is an impossibility. The *Medical World* probably has but very few subscribers in Massachusetts, and will not be a long-lived periodical, unless the homœopathists or the Female College take it up. There are enough of the former in the United States to back it, and enough women in trowsers who can be convinced of the immorality of men midwives, to subscribe for a publication which will support them.

The *Journal*, in the meanwhile, pursues the even tenor of its way. I fear that the editors are not sufficiently independent of the publisher to allow everything to go in that they could wish. The profession in Bos-

ton do not support them as it ought to. The older practitioners here seldom write, and the younger ones were so long kept in wholesome fear of their seniors that they are only beginning. The editors, however, are always courteous, and every one knows that they are able. Still, the *Journal* is rather wanting in the spice which should season a weekly paper.

## HOSPITALS.

There is talk of a new hospital, and the profession have prepared a petition to the city government, setting forth the necessity. There is actually, in this city of one hundred and seventy thousand people, not a single public bed for lying-in women! There is a building called the Lying-in Hospital, but its doors have been closed for some two or three months. Some say want of funds shut it up, others say that there was a quarrel between one of its medical staff (for it had three physicians for fifty patients a year) and the ladies who visited it, which caused the closing up. Be this as it may, the nearest free lying-in bed is three miles down the harbor; a most excellent distance, when it is considered that Boston harbor sometimes freezes for four miles down.

Lying-in women are not the only ones for whom a hospital is wanted. The Massachusetts General Hospital is very hard to gain admission to. There are almost always applications for the admission of chronic cases, waiting for weeks a chance for admission. You can always see phthisis there, but the acute fevers seldom, unless one is placed in a bed belonging to some private individual.

The Boston Dispensary is becoming one of the useful institutions. It is a private charitable association. Many of our own physicians are said to have obtained a start there. For several years past the anxiety to obtain the situations fell away, because of the miserable plan of its organization, and men were sought for the places in vain. Dr. Lawrence, son of the late Amos Lawrence, took the matter in hand last year, and it has been entirely re-organized. There is now a central office, and a corps of physicians and surgeons attached, who will not fail to make it all that it should be; and I am much mistaken if, in ten years from this time, it will not be considered quite as valuable to the profession and the public as any hospital in the country. I do not know all the gentlemen who now are attached to it, but the names of Williams, Lyman, Slade, Blake, Stone, and others well known in Boston, will become well known to the country in due time.

In addition to these, there is a class of ward physicians, younger men, who make visits to patients at their houses. The former receive no pay for their services, the latter have one hundred dollars a year each. The average income of a physician's first year is, ordinarily, no more than that. It will therefore be the means of encouragement to many a young man whose means are small, and whose determination to succeed is strong.

This does not make up for the want of a new hospital. The poor who can support themselves should be found the means of support; those who cannot, the public ought to take care of, and the sick poor are certainly of the latter class. The filling of our almshouses and hospitals with the lazy, has been the means of immense suffering to the worthy. It is not a disgrace to be poor. It ought not to be thought so, and if there was more attention paid by the public purse to the relief of misfortune, instead of

leaving it to private charity, idleness would not so often receive the reward which should be given to those who are willing, but have not the means.

#### EYE AND EAR INFIRMARY.

The Eye and Ear Infirmary is another of our private establishments for the relief of distress. Why this and the Dispensary have not been taken up as a means of educating physicians long since, no one can tell. But we have no clinical institution in Boston, which amounts to a tithe of what Boston could produce. The result is that Boston students are running off to New York and Philadelphia for want of home education. Perhaps at a future day you will learn why medical schools do not flourish in this city, where all other educational projects succeed, and where the means are abundant, nothing being wanted but the proper management.

#### MEDICAL SOCIETIES.

The medical societies here are active in their way. There are three of them. First on the list is the Suffolk District Medical Society. I say *first*, because it is the society to which all the regular physicians belong. It is a branch of the State Society. Its officers are a President, who is *ex-officio* a Vice-President of the State Society, a Vice-President, Secretary, and Treasurer.

Meetings are held on the last Saturday evening of each month, at which papers are read, cases reported, and discussions had upon medical topics. The meetings are usually dull, because there are one or two gentlemen who occupy most of the time in matters peculiarly interesting to themselves. Once or twice within the last year, the hours have been occupied in listening to the complaints of a single member of the profession, who seems to have an idea that he is persecuted, although no one knows why, nor how.

Two or three times a year there are stated meetings for police business, elections, &c. They occasionally have tried members for *mala praxis*. There is no very great chance, however, of one's being convicted, the offenders bullying the members into not voting. Two members only have ever been expelled, so far as I can learn. One of these had already become known unfavorably to our courts, and the other made a defence too feeble to save him.

The principal medical transactions are by the other two societies, both somewhat aristocratic in their management. Their mode of electing members is not known to the profession at large. The older of these is the Boston Society for Medical Improvement. It has a large and exceedingly valuable pathological museum, collected mostly, I believe, by Dr. J. B. S. Jackson, whose fame as a pathologist is not confined to Massachusetts. They meet on the second and fourth Mondays in each month. What business they do can be easily seen in the *Boston Medical and Surgical Journal*. You will see by its columns that many of the older and more distinguished of the profession are on the roll of members.

The other society is the Society for Medical Observation. They say that this society is peculiar in its work. Papers are read by the members in turn, and dissected without much regard to the feelings of writers by the audience. Few men are willing to brave the criticisms to which they are likely to be exposed, and consequently applications are not likely to

be numerous for membership. Still, no one who is not a member of either of these societies can tell much about them, except that they are both very hard to get into.

I forgot to mention that the latter society has a valuable library of journals, which are distributed among the members, and passed from hand to hand in regular order. Their bound volumes stand in the hall, which is occupied by the three societies, and of themselves are a standing inducement to medical men to join.

There is also in Boston a College of Pharmacy. When they meet I cannot tell, nor whether they do much. There is so much bad physic in the world, that the services of this college are needed. It is no difficult matter to become a member. The being a gentleman seems to be a sufficient qualification; for there are among them those who hardly have any other. But this association is young, and the formation of it shows that the druggists are alive to a sense of their own deficiencies.

At some future day, I may give a slight account of the druggists, and (I trust they will pardon me for speaking of them in the same sentence) of the quackery of Boston.

STUDENT.

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BOSTON, January 9, 1857.

#### HEALTH OF BOSTON.

Boston, for some reason or other, has not been a very profitable home for physicians for the past few years. Whether this is to be attributed to the increased supply of pure water, or whether there is a periodical increase of disease and a return to health, and that we have been at the return swing of the pendulum for a few years, I cannot say. It is evident, however, that Boston has enjoyed an immunity from disease, that is not likely to last.

#### SCARLET FEVER.

The daily papers will tell you that Scarlet fever has been making terrible ravages this season. This is true to a certain extent. So true is it, that if we should have as many cases of yellow fever as there have been deaths, in some weeks, from Scarlet fever, the city would be deserted by a very large proportion of its inhabitants. And yet the former, almost every physician feels confident, is non-contagious, the latter eminently contagious.

Scarlet fever has not been so violent, nor so common, as is generally imagined. There are physicians who have hardly seen one case a month during the last year, while in active and extensive practice. Others have been constantly occupied with the cure of it, their cases numbering, it is said, more than one hundred each. The cause of this difference is to be sought in the class of business. Through the summer, it is my impression, that the fever was confined to the lower Irish and German population. From the middle of July to the first of September, was the vacation of the public schools, and there was little intercourse between these and the American children. During these weeks, a large number of those children, whose parents are able to bear the expenses, are in the practice

of leaving the city. From the first of October, the fever began to spread in the schools, and, as the season went on, it was more common among the children of American parents. The deaths have never been excessive among the latter. Greater cleanliness, better ventilation, and more careful attention to the prescriptions of medical attendants, are a sufficient explanation.

There is no prevailing system treatment of Scarlet fever in Boston. All the remedies possible, from mercurials to cold effusion, are in vague, including anointing, by one gentleman, with cold cream, and another with olive oil, and from this through the various greases, to bacon rind.

#### HOMŒOPATHY AND BELLADONNA.

The Homœopaths, during the fall and winter, have been harvesting. The dread of parents is so great, that they are willing to try any prophylactic, and many a child is supposed to owe its life to belladonna, who never was exposed to the disease. At last some of the apothecaries have caught the alarm, and fearful lest some other purses than their own should be filled, and willing to pander to the fears of parents, have displayed ounce vials filled with something which looks marvellously like distilled water, but is labelled "Belladonna." Why not?

The homœopaths have a way of calling everything scarlet fever, which is attended with redness of the skin, and even a sore throat, which has no such complication, passes for this disease. They are not all guilty of deception in this matter, for the greater number of homœopathic practitioners are totally unable to distinguish between different diseases. Did it ever occur to you, my dear Doctor, to count up the number of men who were able to get a living by regular practice, who had deserted it for homœopathy? Are they not usually the men who have failed in the practice of medicine, and adopted the practice of this peculiar form of quackery, on account of its gentility? Thomsonism, the quackery of the kitchen, requires too much labor, and some little knowledge. Homœopathy, the quackery of the parlor, requires no previous education, because, if honestly practiced, it never does any immediate mischief.

Did you ever know any thoroughly educated physician in your State, who, whatever his poverty might be, took up the practice? If you ever did, was he a man whose judgment or candor in other matters was at all to be relied on? I never heard of one.

This is rather aside from scarlet fever and belladonna. The Female Orphan Asylum in this city is said to have been sensibly afflicted during this season. Stories of numerous coffins carried in by night have horrified the timid, and horrid pictures in the air have been drawn by the tongues of the marvellous. The truth is, I learn from good authority, that one-fourth of the children, less than thirty, have had the disease. All of these had it mildly, but one, who died. What an opportunity of testing belladonna! Softly. Belladonna was tried upon every child in this same house, years ago, as a prophylactic. The number exposed was the same as this year. The number who took the fever was the same. The number of deaths was the same. Moreover, the epidemic was not so common outside the walls as this year.



## "PRIVATE AND CONFIDENTIAL." TRALL'S CIRCULAR.

While I was visiting, this evening, a circular was brought to my door, headed "Private and Confidential." Now, on Paddy's plan, that not being able to keep a secret, he would tell it to some one who could, I shall let you know what it is. One J. Silas Brown, "agent for Boston and vicinity," has requested me, *confidentially* of course, to act as his *deputy* agent, he being the agent of one R. T. Trall, M. D., (so says the principal circular,) of 15 Laight St., New York. I presume that Dr. Trall is one of the distinguished men of New York, although I never heard of him before. Of course that only "argues myself unknown." The object of the agency is primarily to collect statistics upon the production of sex at pleasure; secondarily and really, to inform the profession that he has discovered a method of preventing pregnancy. The circular is, in fact, one of those filthy advertisements, probably intended to fall into the hands of those who make a business of seduction, and a trade in female virtue. It would not be worth one's while to allude to this circular, but that certain physicians in Boston, having the desire to investigate the electro-chemical baths, rather patronized this J. Silas Brown, who keeps some of the tubs in Lagrange Place. As these gentlemen stand well in the profession, perhaps they may be pleased at being asked to act as his agents. The price of the precious knowledge is only \$100, "one-half of which will be abated, on the presentation of satisfactory evidence that the party is really poor." There is no information as to whether clergymen are informed gratis; but, to make the thing take with the public, in other words, to make it cocksure, this should not have been omitted.

## THE INFLUENCE OF FASHION ON SURGERY.

We are in the midst of winter, and cold it is even for winter. The Metropolitan Railroad, which runs its horse cars through the main street of Boston, will doubtless have its effect on our profession. The inability of the drivers to turn out obliges the passers-by to keep to the right, as they should. There are few omnibuses to cross from side to side depositing passengers—consequently the streets are less often blocked, and accidents less frequent. Every one knows how the practice of surgery has been influenced, at times, by the fashion of dress. High side-pockets in the great coats were attended with fractures of the olecranon. When the pockets came down, so did the fractures, and the radius and ulna were the endangered bones. If, with the former, the humerus was oftener dislocated, with the latter the forearm bore the brunt of the blow. Why may not the introduction of horse railroads produce an entire revolution of fashion, in the style of accidents? Tight lacing, our elders tell us, produced deformity of chest and cough. Heavy skirts, tied about the body, released the chest to a certain extent, but the effect was seen in the abdominal organs, and various uterine displacements and discharges followed. Who can foresee the sequel of crinoline? Is it to be rheumatism, or neuralgia? dysuria or metritis?

How many cases of amaurosis will little bonnets produce? Or is iritis to be the fashion? Verily, civilized life has its ills.

## FORTHCOMING WORKS BY DRS. DURKEE AND CHANNING.

It is announced that Dr. Durkee, of this city, is about publishing a work on venereal diseases. I believe he claims to have some new views to bring forward on the subject.

The Boston practitioners have not been before the public much, as book-makers. Two or three ex-professors in the Massachusetts Medical College have collected their papers from journals, and have given them to the world in duodecimos; but no treatises of any length have appeared. It is generally believed that Dr. Walter Channing has a work in hand, the result of some forty years' experience in his specialty. Whatever it may be, every one believes it will contain a large number of facts, and that at any rate it will be readable.

Yours truly,

STUDENT.

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*Sketch of the Geology of Tennessee.* By RICHARD O. CURREY, M. D.,  
Knoxville, Tennessee.

## COAL REGION OF TENNESSEE.

Passing by the consideration of any other mineral or ore peculiar to East Tennessee, as well as its agricultural facilities for the present, I will next in order enter upon an examination of the Appalachian coal field lying within the limits of Tennessee.

No subject has caused greater solicitude to English capitalists, than the *possibility* that at no very distant day the coal fields of their island home would be exhausted. So rapidly has the consumption of this mineral increased for the last few years, both from the increase of population, and the extended application of steam, that many of the mines have already failed. Some of the most scientific geologists and intelligent miners were commissioned by Government to investigate this subject, and though they differed as to the probable length of time that it would require to completely exhaust the supply, they all agreed that it was an event which must sooner or later ensue. It is true that generations may pass away before it occurs; but, like a wise government, there was immediate prohibition put upon the destruction of the waste coal at the mouths of the pits, and a tax levied on its exportation. The result of such a catastrophe is more easily imagined than described. The thousands of busy hands now engaged with her looms, and spindles, and anvils, and rollers, as well as the millions of active capital employed in keeping them in motion, will be driven elsewhere ere such an event happens; and who cannot see, in the departure of these, the fading glory of the English kingdom, and the loss of her power. This is a striking illustration of the value of this single mineral. And while even a prospect of a failure strikes English hearts with terror, may we not anticipate a bright future from the developments of this mineral in this country. From Maine to Texas, there is scarcely a State that does not possess, to some extent, portions of a coal field; while in many it constitutes the principal formation.

In the Massachusetts and Rhode Island coal fields, there are estimated to be about 500 square miles. In the Appalachian, extending from New York, through Pennsylvania into Ohio, through Virginia, Kentucky and Tennessee, and terminating near Tuscaloosa, Alabama, being 800 miles in length, with an average width of 180 miles, and covering an area of more than 100,000 square miles, there are contained, at a low estimate, one million of millions tons of bituminous coal. In the Ohio river coal field, we have another immense basin, embracing nearly the whole of Illinois, southern part of Indiana, and extending across the Ohio into Kentucky; the entire area being not less than 55,000 square miles. In Michigan, including about two-thirds of the State, another field has been explored of 12,000 square miles. In Missouri and Iowa, is still another of 50,000; while Arkansas and Texas each contain important fields. So that, supposing those 250,000 square miles of coal deposits to have an average thickness of 50 feet, we have no less than *three and a-half millions of cubic miles* of coal in the Union.

Two classes of coal are found in our country—the bituminous and the *non-bituminous*, or anthracite. The latter class is found only to a limited extent; being the kind obtained in eastern Pennsylvania, and is said to have been found in East Tennessee. Though these two classes possess striking marks of difference, yet they are to be referred to the same origin. The same fossil plants have been found in each; and as anthracite is coal without bitumen, there has been observed a gradual increase of this property towards the western limit of the Appalachian field. The anthracite has been debituminized by its contiguity to the primordial rocks, and to its having been subjected to a great pressure during its formation. It is similar to, and is, in fact, natural coke.

The Tennessee coal field, being part of the Appalachian, is embraced within the limits of the counties of Claiborne, Anderson, Morgan, Scott, Fentress, Campbell, Overton, Grundy, Van Buren, White, Franklin, Bledsoe, Marion, Hamilton, and Rhea, composing the range of Cumberland mountains. These mountains are again subdivided, with local names attached. The eastern base of these mountains, so far as I have ascertained, rest upon the inclined strata of East Tennessee—though in some places there intervenes a table land of the siliceous stratum and old red sandstone. As we cross the mountains, and in passing through the Sequatchee valley, we notice on its eastern side the inclined strata peculiar to East Tennessee; while across the Sequatchee river and on the western side, a hard, white limestone is found, lying horizontally and overlapping the other strata. This peculiarity is observable throughout this rich valley—being traced as far up as Crab Orchard. Here limestone ledges present a striking contrast with the general character of the surrounding country and may be regarded as a wise provision in the midst of these sandstones and sandy soils. This limestone possesses a peculiar structure—being composed of an infinite number of egg-like fossils; hence it has been termed *oolite* limestone; but it possesses another fossil—the *pentremite*—in as great abundance, and it is also called the *pentremital limestone*.

This limestone is also well displayed all along the western declivity of the mountains, intervening between the shales and sandstones of the coal measures, and the old red sandstone of Devonian system below. Its absence on the eastern, and its unfailing presence on the western decliv-

ity, is a striking peculiarity. From this *pentremital* limestone to the summit of the mountains are included the coal measures. They consist of strata of coal, shale, sandstone and conglomerates alternating with each other; there being sometimes from four to six of such series in one elevation, but of varying thicknesses. While on the western declivity of these mountains, the coal occupies almost uniformly a horizontal position, on the eastern the entire strata of coal, shale, sandstone, &c., appear to have been disturbed in some places, being tilted up into an inclined position, while in others no such action appears to have taken place, as they retain the horizontal position.

As this is a subject of interest to our citizens, I have made an analysis of several specimens of coal placed in my hands, giving, also, other analyses made at different places by other persons.

The following is the per centum of each specimen :

| LOCALITY.                            | CARBON. | VOLATILE<br>MATTER. | ASHES. |
|--------------------------------------|---------|---------------------|--------|
| 1. Pittsburg, .....                  | 55      | 38                  | 7      |
| 2. Trade Water, Ohio River, .....    | 69,05   | 21                  | 9,95   |
| 3. Rock Spring, Ky., .....           | 80,56   | 10                  | 9,44   |
| 4. Ohio River, near Caseyville, .... | 69,58   | 19                  | 11,47  |
| 5. Addison's br., Cumber'd mt., ...  | 83,22   | 9                   | 7,78   |
| 6. Anderson Co., E. Tennessee, ...   | 82      | 10                  | 7      |
| 7. Crow Creek, .....                 | 77,70   | 14                  | 8,30   |
| 8. Sewanee Mining Company, .....     | 79,56   | 14,21               | 6,25   |
| 9. Kimbrough's, Roane County, ...    | 71      | 17                  | 12     |
| 10. Gillenwater's, Rhea County, .... | 69      | 14                  | 17     |
| 11. Alabama, Tuscaloosa, .....       | 80,96   | 12,96               | 6      |

The analysis of No. 1 was obtained from Professor Johnson's Tables—Nos. 9 and 10 from Professor Troost's Reports, and No. 11 from Professor Tuomey's Report. No. 5 is the variety of coal brought to the Nashville market, and is of a compact structure, and possessing iridescent colors—No. 3 is from a new mine on Trade Water, Ky., 18 miles from the Ohio River.

Though it is known that the range of the Cumberland mountains belongs to the coal measures, yet so little has been done for its actual exploration, that it is impossible to say where, in particular, coal is to be found. So important an element is it to become in our State welfare, that it is highly necessary that a thorough examination of this field should be made, with accurate analysis, accompanied with a special map, and sections of the entire region.

In the table of analyses I have presented specimens from those localities which are most abundantly worked. There are many others opened for the supply of their immediate neighborhood.

In the *Raccoon* mountains, on the line of the Nashville & Chattanooga Railroad, from whence it is obtained for transportation into Georgia, the coal is similar to that produced from the Sewanee mines—being soft and very readily crumbling into powder. It is admirably adapted for manufacturing purposes.

In the *Sequatchee valley* many valuable banks are opened, the coal from which is of a very superior quality. The construction of a branch railroad to the head of this valley would open to market one of the

most productive valleys, as well in agriculture as in coal, to be found in the State. In the vicinity of Pikeville alone there are no less than six banks, all of excellent quality.

In *Walden's ridge*, which separates the Sequatchee from the Tennessee, coal seams are found extending from one declivity to the other; that on the eastern declivity affording the coal for the supply of the Chattanooga market.

The coal which is brought from Poplar creek and other localities in Anderson county, for clearness, purity and value, surpasses any coal that we have yet examined. In many instances it is beautifully iridescent. It is this coal which is brought to the Knoxville market, a distance of sixteen miles by wagon, and by water a distance of about two hundred.

In *Cross mountain* and *Elk river valley*, the same valuable banks are found. To the west in *Morgan county*, there is an inexhaustible supply, only awaiting some facility for transportation to market, to render these excellent stock-raising lands as valuable for their mineral resources.

The opening of these banks, and the construction of railroads for its speedy and constant transmission to points, both East and West, would, in a few years, tell upon the industrial pursuits of our citizens. The construction of such a road as is contemplated in the Nashville and Knoxville Railroad, and especially if continued to the Mississippi river, would draw out from these rich store houses, treasures that would inspire the loom and the anvil with new life, and accelerate the speed of the plough. The construction also of the Kentucky Railroad, necessarily passing through the rich coal and iron banks of Anderson, promises a bright future for the manufacturing interests of East Tennessee. This is a subject in which the whole State feels a deep interest, relating, as it does, to State aggrandizement and domestic comfort. Placed in juxtaposition with the iron and the copper, no one can fail to see what the results of their development would be. Not only would capital flow into the country, but population also; until the State would become the Keystone of the South, as Pennsylvania is of the North.

In these coal measures, good millstones can be obtained from the conglomerates, and grindstones from the sandstones; while the strata of reddish and of white clay would answer admirably for burning into fire brick and fire stones.—*Southern Journal Medical and Physical Sciences.*

*A Monograph on Ovarian Tumors; with an extended view of Ovariectomy as a means of cure.* By T. M. TWEED, of Eckmansville, Ohio.  
(Continued from page 419.)

*The Symptoms of Ovarian Dropsy.* We may mention in passing, that the term, Ovarian Dropsy, is applied to almost all cystic tumors, whether they arise in the ovary itself or of its broad ligament, in the omentum, or in the dilatation of the Fallopian tube. They each produce nearly the same symptoms, and, therefore, are only treated separately in the pathological consideration of the subject.

We shall refer the symptoms of this disease to two periods of its progress; the other after it has ascended into the abdominal cavity.

The first symptoms usually brought under the notice of the patient, are a deep seated pain in one or both groins, with great uneasiness; a bearing down and sense of weight in the pelvis; and a peculiar fullness in the lower part of the abdomen. More particular inquiry elicits that there is a throbbing pain almost constantly felt in the fundament; that the pain is produced in passing feces; and that there is also a pain and burning sensation just under the hip of the affected side; most usually the limb on that side becomes numb; a partial loss of motion may occur; pricking and shooting pains are felt, and œdema may take place. The veins of the limb become large in some cases, and piles are often complained of, producing occasional hemorrhage. The menstrual flow is usually regular, but may become profuse, and at this time it often contains white exudations. There is, also, pain in the sexual embrace.

The *touch* at this stage of the disease reveals the uterus healthy and in its natural position; but by placing the finger posteriorly, and at the upper portion of the vagina, the patient will complain of pain, and on further examination, a tumefaction will be found. This is more distinctly felt, and the pain is more acute when the examination is made per rectum.

To the fact of an inflamed ovary being felt through the rectum, and that without difficulty, my own experience abundantly testifies; although this point has been disputed by an eminent Professor of Obstetrics. I have carefully watched the changes that have occurred during the progress and cure of these inflammations, and have distinctly traced the increase and decrease of the diseased organ through the rectum.

Constipation is a most frequent symptom. The pressure of the enlarged ovary on the rectum, and the fear of pain in defecation, soon produce accumulation of feces, which causes distension of the abdomen, not so much, however, from the quantity of the fecal matter retained, as the flatulency produced; so that in the early stages of the disease, a large and flatulent abdomen is usually present, and the patient always complains of distension. The functions of the bladder become interfered with; there is frequent desire to make water, and sometimes inability to pass it.

At the commencement of the disease, constitutional symptoms often arise which simulate those of pregnancy. The stomach frequently becomes affected in the morning; there is occasional syncope; the breast become painful, and it is said that the one on the affected side is more so than the other. These symptoms are all worse at the menstrual period, which in the majority of cases, is but little disturbed, and until the latter stages, is regular, unless the cause of the disease arises from its suppression. At this time a tumor can be felt bulging into the vagina, most usually situated between it and the rectum.

When the tumor rises into the abdomen most of the symptoms we have referred to are alleviated, but others succeed. When the tumor is in the pelvis, it may remain stationary and give little or no trouble to the patient, and is only ascertained when it presents an obstacle to parturition. But, however, it most usually continues, sometimes gradually, at others, very rapidly to increase, and the symptoms at this period are mostly referable to pressure. The bladder now suffers most; its cavity is drawn up, reduced, and unable to distend, so that there is frequent desire to pass

water, while small quantities only are ejected. If the tumor occupies the entire abdominal cavity, suppression of urine may result from the pressure of the cyst upon the kidneys. Diuretics fail to increase the quantity of urine, while paracentesis may produce an instantaneous flow, with great relief to the patient. This fact is well illustrated by the case given by Burns of Madame de Rosney, "who in the space of four years, was tapped twenty-eight times; for seven days after each puncture she made water freely, and in sufficient quantity, the appetite was good and all the functions well performed; but in proportion as the tumor increased, the urine in spite of diuretics, diminished, and at last came away only in drops."

When the tumor first occupies the abdominal cavity, there is great tympanitis, so much so as to obscure frequently the disease. We are unable to feel the tumor, and fluctuation can not be perceived; but it gradually increases, displaces the flatulent intestines, and occupies the greater part of the anterior portion of the cavity of the abdomen, causing pressure upon all its organs, and especially upon the stomach, giving rise to frequent sickness after taking food. Edema occurs in the lower extremities, from pressure of the veins of the abdomen; dyspnea comes on from its encroachment on the diaphragm, and the patient gradually sinks from exhaustion.

On examining the abdomen we find a circumscribed tumor in one or both groins, movable under the integuments, not very painful on pressure, and traceable into the pelvis. There may or may not be sensible fluctuation. As the tumor increases it rises above the intestines and stretches the walls of the abdomen, which have a tense and shining appearance, with enlarged veins on the surface. When the patient is lying on her back, the tumor is more apparent on one side than the other. The abdomen, however, retains its prominent shape, is not flattened at its most salient point, and this appearance does not vary, whatever position the patient may assume. The tumor may extend upward to such a degree as to nearly dislocate the ensiform cartilage.

Fluctuation is frequently observed distinctly throughout the whole tumor, which indicates that the fluid is contained in one cavity; while sometimes there are only partial fluctuations, bringing us to the conclusion that it is contained in many. This has been repeatedly observed after death. In a cyst containing two or more cavities, we are unable to recognise fluctuation when the septum intervenes, although it is quite distinct in the individual sacs.

Again, fluctuation may not be perceived so distinctly when any portion of a solid mass intervenes between the fluid and the hand. The mode of testing the presence of solid matter in any portion of the cyst, is to place the hand on one side of the tumor and tap it smartly with the other at a point directly opposite, noting the force of fluctuation; the operation is then to be reversed, and if the fluctuation is equally distinct in both operations we may say there is no solid matter between those points; but if it is less distinct or distant in one case than in the other, the solid matter does exist.

One may be much deceived by the character of the fluctuation, and it becomes a matter of great tact to draw any inference from it. In the first place, a cyst may exist when the fluctuation is very distinct in parts, extending to the circumference of the tumor, and yet it may be composed

of numerous small cysts. A case of this kind was seen by many medical men well conversant with the disease, who decided that there was a very large cyst containing solid matter at various points of its inner surface, but the distinct fluctuation was so marked that they supposed the original cyst to be a very large one. This patient submitted to extirpation, and it was found that the whole tumor was composed of an immense number of cysts, and nearly all were filled with a thick fluid. Another case is recorded in which fluctuation was so distinct that all who examined it, decided that it was unilocular in character. She was tapped, but the operator was obliged to desist, for no fluid escaped, though a large trocar was used. She died, and the tumor was found to be composed of a number of cells filled with a thick glairy mucus.

Movements in the abdomen are frequently felt by patients laboring under encysted dropsy. These sensations are variously described, some observe only a beating in the abdomen, others perceive motions like those of a child; but they are all greatly influenced by the mind, and become more frequent the more the attention is directed to them. They usually depend upon the pulsations of the aorta on the distended cyst.

Percussion gives good in ovarian dropsy. There is always dullness from the pubis upward to the circumference of the tumor. This is caused by the mass being placed before the intestines, so that the resonant sound cannot be elicited though it; but if you apply the same means of diagnosis posteriorly in the lumbar regions when the patient is lying on her back, or even around the circumference of the tumor, you obtain a resonant sound; because the intestines occupy those spaces. This is one of the chief distinguishing marks between this disease and ascites; for in the latter when the patient is lying on her back, the fluid gravitates posteriorly, and therefore yields a dull sound in the lumbar regions, and as the intestines are free, they float on the surface of the fluid, and give a resonance anteriorly. On placing the hand gently on the abdomen and carefully moving the parietes on the tumor, we may sometimes feel a crepitus, or a sensation like that produced by the creaking of leather. This is perceived generally where adhesions exist between the tumor and walls of the abdomen, they being long enough to allow of partial motion. But adhesions often exist, where no crepitus can be felt. This physical sign was pointed out by Dr. Bright, who described a case in which it occurred in Guy's Hospital Reports.

The tumor itself is not always found to be smooth in all parts, but frequently portions project and feel hard and solid to the hand, and if firm pressure be used in different parts, hard portions can be ascertained to exist although they do not project. "In this way, if the abdomen be not very tense," says Dr. Bright, "we discover considerable masses of unyielding matter partaking of the general rounded feel of the whole disease, but conveying the impression of more or less flattened spherical bodies attached to the inside of the fluctuating tumor; and these bodies are sometimes so large and so variously placed as to suggest to the unexperienced observer, that the liver, spleen, or the kidneys are enlarged or in some way involved in the disease.

One of the most ludicrous if not serious errors in the diagnosis of this disease which its whole history affords, occurred in the State of Ohio, not many years since. A surgeon of high attainments, extirpated from the side of a woman what he pronounced to be the *Liver*. The Doctor and



his colleagues who witnessed the operation, believed it to be so, and published it to the world as one of the most remarkable achievements in surgery! The woman died shortly after, and a *post mortem* examination revealed the fact that there was a healthy and perfect liver still in the abdomen; and the discovery was thus made, that instead of a Liver, they had removed a tumor somewhat resembling that organ; in all probability an ovarian diseased mass.

We frequently find that the vagina is much elongated, giving a funnel-shaped character to the cavity; the os uteri is displaced, usually drawn upward to the side affected, and as it were, twisted upon itself. The uterus is found to be movable and light, and unconnected with the surrounding structures. It can be thrown upon the rectum by the uterine sound; and if the tumor be free, it can be elevated above the pubis. Sometimes, however, the uterus is so pressed between the tumor and the pubis, that it becomes fixed, so that it cannot be moved, and appears connected with the tumor.

The ovarian tumor may project upon the vagina and press together its walls so that it is almost impossible to introduce the finger, or find the os uteri. In one case of this sort which came under our observation, the os uteri was carried quite above the pubis, and with the utmost difficulty could be reached. In some cases the uterus lies across the vagina with its fundus on the rectum and below the sac, so that the finger immediately as it enters the os externum, touches the posterior wall of the uterus. These malpositions can be distinctly ascertained by the uterine sound.

*The Diagnosis of Ovarian Cystic Tumors.*—In no disease is a correct diagnosis of such vital importance as in ovarian dropsy; upon it depends the chance of cure, or the entire abandonment of the patient. Its *difficulty* only equals its *importance*; and to prove this assertion, it is only necessary to refer to the *six* patients who have already submitted to the abdominal section, without saying more of the woman who had her liver extirpated—although it proved to be a mistake!

We shall, therefore, so far as our limited opportunities for observation will justify, lay down the diagnostic character of this disease, and point out certain signs whereby it may be distinguished from other abdominal enlargements.

I. When the disease is situated in the pelvis, and before it rises into the cavity of the abdomen, it may be confounded with two malpositions of the uterus, viz: retroversion and retroflexion.

1. The ovary is generally felt in the first stage of the disease, between the rectum and the vagina: in some cases fluctuation may be observed, but in others, they are more obscure, and may be mistaken for *retroversion* of the womb. When we examine a patient laboring under the first stages of ovarian dropsy, we find a circumscribed tumor at the posterior portion of the vagina, between that canal and the rectum, painful on pressure, and very much resembling the fundus of the uterus; there may be retention of urine and constipation; the os uteri will be found in its proper position, looking backward, the body of the uterus forward, and movable, as indicated by the uterine sound. The local symptoms are much less severe than if actual retroversion had occurred. In retroversion, the os uteri is thrown forcibly forward and upward, and the womb is fixed and very painful.

2. *Retroflexion* of the womb is more likely to be mistaken for cystic dropsy. This is a malposition in which the fundus uteri alone is thrown back upon itself like a common retort, the os being in its natural position, with a tumor directly behind it, between the vagina and rectum. This is the body of the uterus. In such a case, by careful manipulation, the fundus can be restored to its proper position, and the tumor consequently disappears. This will not occur if it be an ovarian tumor.

II. When the tumor occupies the abdomen, it is to be distinguished—

1. *From Ascites.* In ovarian dropsy we find the patient generally in good health, complaining of nothing but the distention of the abdomen, which she states has been gradually increasing, and had its origin in one or both inguinal regions. The abdomen has a tense appearance, and a circumscribed fullness can be perceived. Sometimes, however, the tumor occupies and distends the abdomen to such an extent that this characteristic is not distinguishable. The abdomen is more prominent at one side than the other, and the veins are very much distended. When the stethoscope is applied, no borborigmi are heard, or at least they are heard very indistinctly, while percussion elicits a dull sound anteriorly. But at the upper portion of the tumor, and in the lumbar regions, the clear sound of the intestines is found. Fluctuation is often distinct, but sometimes obscure; more distinct in some parts than others, and is not observed in the lumbar regions.

The dullness on percussion, and fluctuation, are always present in the same part of the abdomen, whatever position the patient may assume. They are both found anteriorly. The tumor is usually smooth on its surface, but occasionally irregularities are observed at different points of the abdomen, which appear like projections. These may be so large as to be mistaken for enlargements of the viscera, when in their position; but a careful examination will distinguish these prominences as parts of the cyst. The vagina has a funnel-shaped character, and is usually elongated; the os uteri is turned to the side affected; but sometimes the tumor bulges into this canal, and fluctuation can be felt there.

On the contrary, in *ascites*, the patient has generally a diseased aspect; the abdomen is not tense, and its greatest distention is below, when in the erect posture; on lying down it becomes flattened, change of posture producing change of form. Borborigmi can be distinctly heard with the stethoscope; and when in the supine position, anteriorly percussion elicits a clear resonant sound, which is the result of the intestines floating upon the fluid contained in the cavity. There is dullness in the lumbar regions from the fluid descending to these parts. In the erect posture fluctuation is most distinct anteriorly; in the supine, in the lumbar regions; œdematous effusions are found in other parts of the body, as in the legs; and the veins of the abdomen do not attain so large a size as in ovarian dropsy.

Thus, then,—from the fixed character of an ovarian tumor—from dullness on percussion, anteriorly, not being changed by change of posture—from the resonance in the lumbar regions being constant, and from the tension of the abdominal walls being invariable—we can distinguish cystic dropsy from ascites.

When, however, ascites is present with an ovarian tumor, as frequently happens, the signs of the two diseases become blended. In that case, slight percussion produces a superficial fluctuation, seen to the eye, and

apparently very near the surface; but if the fingers be suddenly applied to the abdominal walls, they come at once in contact with a hard substance, which evidently gives a fluctuation entirely distinct from the former.

2. *From Pregnancy.* Ovarian dropsy may be accompanied by many of the symptoms of pregnancy. The breasts may become enlarged, and a thin secretion take place; they may become tense and painful, more particularly the one on the affected side. Movements are, also, frequently observed in the abdomen resembling those of a fetus, and the patient may consider herself pregnant. But Ovarian dropsy may be distinguished from this natural state by the disease commencing on one side; by the regularity of the menstrual function; by the absence of the areola and follicles of the nipples; and by the *touch*, which reveals the uterus small, movable, and of its natural form. No ballottement can be perceived, and the os and cervix are of their natural form and consistency. The *bruit* of the enlarged vessels of an ovarian tumor, has been mistaken for the placental murmur, but there is no fetal pulsation. We should recollect, however, that pregnancy may co-exist with ovarian dropsy, and materially obscure the diagnosis. Many women have conceived and borne children during the progress of this disease. The tumid state of the nipple—the areola and follicles—the suppression of the catamenia, the changes which take place in the os and cervix uteri—reveal the presence of pregnancy during the first months; at a later period, the placental murmur and the pulsation of the fetal heart, will dispel all doubts.

3. *From other Cystic Tumors.* It is exceedingly difficult to distinguish these tumors from ovarian dropsy; they assume all the characteristics of the latter disease. We may be assisted when they are small, and if we ascertain their seat of origin; but when large it is impossible to distinguish them by the ordinary means of diagnosis. The uterine sound is the only instrument by which we can distinguish ovarian cysts from other cysts of the abdomen, and this not by positive information, but by negative signs.

“I have found,” says Dr. Simpson (London and Edinburg Monthly Journal, for July, 1843,) “advantage from the negative information given by the bougie, even when the tumor was abdominal in its seat. An example will best illustrate my meaning. In a case sent to Edinburg a few months ago, for the purpose of having some opinion given in regard to its nature, an immense abdominal swelling that was present, and which had been supposed by some medical gentlemen who had seen the patient, to be ovarian, was shown not to be so by sufficient evidence of the following nature. The uterus was displaced obliquely backwards, and the fundus of the bladder was displaced to the right iliac region by the abdominal enlargement, circumstances which were easily ascertained by introducing the uterine sound into the cavities of both these organs. Further, the uterus, although displaced, was quite movable, and when its fundus was turned by the bougie toward the site of either ovary, and the abdominal tumor lifted up as high as possible toward the epigastrium, no obstruction was met with: nor was this great change upward in the direction of the tumor found to produce any dragging effects upon the uterus, as held by the bougie or its connections; effects which, unless under the improbable supposition of a pedicle several inches long, would have inevitably occurred if the diseased mass had originated on, or was con-

nected with, the ovaries or uterine appendages. So far the evidence was negative, but so far important. I may add that other characters of a more positive nature—the history, the particular form, consistence of the tumor, its position in point of the substance as ascertained by percussion, etc., seemed to show, seeing that it was not ovarian, it to be in all probability one of those hydatigenous tumors that sometimes form in the tissue of the omentum, and whose physical symptoms during life, in many respects correspond with those of ovarian dropsy.

4. *From Tumors of the Uterus.* These, when they assume the pedunculated form, are very likely to be mistaken for the disease under consideration. Uterine tumors have been removed under the impression that they were ovarian, by Messrs. Heath, Otter, Atlee, and others. A distinguishing sign of these growths is the increased weight of the uterus. If we find that the uterine sound passes, as it were, into the morbid mass—if the tumor and uterus can not be separated—and if every elevation and depression of the tumor corresponds with the movements of the sound, we may then conclude that the tumor is uterine. But if we find the uterus small and movable, and the sound passes anteriorly to the tumor—if the uterus can be separated from the tumor, and thrown upon the rectum, then we may very confidently state that the growth is not uterine in its character.

5. *From a distended Bladder.* This is not a frequent but an occasional mistake, produced by want of care in the examination. The true state of the case can be readily ascertained by simply introducing a catheter into the bladder—an operation which ought always to be performed before any other is commenced in the organs of the female pelvis. The uterus sometimes, though rarely, is distended with fluid, and may also be mistaken for cystic dropsy. When, however, it is distended to any extent, its tissue is developed as in pregnancy, the cervix disappears, and on percussion of the abdominal parietes, fluctuation can be perceived by the finger in the vagina.

6. *From Carcinomatous and Fibrous Tumors.* In the early stages, ovarian dropsy assumes the hardness of the carcinomatous tumor of this organ; but the latter more rapidly effects the health of the patient. Such tumors are heavier, the surface is much more lobulated, and there is no fluctuation; their progress is very rapid, but they never acquire the size of ovarian cysts.

Again, ovarian dropsy may be mistaken for fibrous tumor. This error of diagnosis may occur in the multilocular variety, complicated with solid matter. A case in point came under the notice of Dr. T. S. Lee. "A patient," says Dr. Lee, "presented herself with an abdominal swelling on the right side, hard and without fluctuation, not at all movable. but it could be traced down into the pelvis; it had been a considerable time in its formation, but it now began to increase. The examination per vaginam, discovered that the brim of the pelvis was occupied by a solid tumor; a small nodule was felt rather in front of the centre of the pelvic cavity, in which was the os uteri. The sound passed upward and forward nearly four inches; it moved with difficulty, as through a cavity, the sides of which were much compressed. This examination was made in December. Here, then, you have every characteristic of a fibrous tumor in the posterior walls of the uterus. The cavity is elongated, the uterus is fixed by the brim of the pelvis, and the tumor in the abdomen is hard

and smooth, possessing no fluctuation. The tumor now rapidly increased, and in the January following had occupied the whole cavity of the abdomen. There was then distinct fluctuation in particular parts, and this fact disclosed the real nature of the case, viz: that it was a multilocular cyst, complicated with much solid matter." This is an interesting case, and deserves attentive study.

7. *From accumulation of air in the intestines.* Many instances are on record in which flatulency of the intestines has been mistaken for ovarian disease. We have the history of at least six patients, who have submitted to ovariectomy, and no tumor was found, but the uterus and its appendages were healthy. But gaseous distention of the intestines very often strongly resembles an abdominal tumor. Dr. Buckner, in a note to a manuscript lecture, observes: "I have been consulted recently by a patient in this city, who supposed, and had been told by her attending physicians, that she labored under ovarian disease. She had formerly been pronounced pregnant. The abdomen was very much distended, almost to the size of the full period of gestation; and her gait was that of a pregnant woman. On examination, however, the uterus was found to be healthy, and the abdomen greatly tympanitic. This tympanitis has entirely disappeared, and the patient, under the use of brisk purgatives, is now as small as ever she was."

The resonance on percussion is an infallible diagnostic sign of this disease; but sometimes a peculiarity arises, and must be guarded against; and that is that the ovarian cyst itself may be tympanitic from its adhesion and subsequent communication with the intestines, the air of the latter passing freely into the cavity of the former; but before this takes place, sufficient time is afforded to discover the nature of the original disease.

8. *From the enlargement of the viscera of the abdomen.* The hardened masses frequently found in multilocular cysts, have been mistaken for the diseases and enlargement of various organs of the body, as the liver, spleen, omentum, mesentery, etc. But when the viscera are enlarged, the general health suffers materially; and the enlargement commences from above, passing downward. The irregularities of an ovarian cyst are only to be found some considerable time after the disease commences; while morbid enlargements of the viscera can be detected from the beginning.—*Cincinnati Med. Observer.*

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### *The Presidency, and place of meeting of the American Medical Association.*

No member of the profession who has any regard for the honor and interest of medical science in this country, can regard with any other than feelings of the loftiest pride, the achievements and position of our National Medical Organization. It has been in existence but a few years, not having yet attained its majority, and yet so much has already been accomplished by it, that we have just reason to be proud of our Associa-

tion. We are aware that there are defects in its organization, but it does not follow that they may not, or that they will not be removed by time.

We are also aware that some members of the profession expect *too much* from the Association—that they look for its positive action in the correction of abuses which it can only reach by a sort of moral influence. The Association is not a law making power for the profession at large. It has a code of ethics for the government of *its members*, and all the power it has, is, to cut them off from membership for non-conformity to its code. This it has done, and this we trust it will always do, whenever occasion requires.

Among the more prominent defects in the machinery of the Association hitherto, is the law ordained by custom, that the President of the Association should be chosen from among the profession of the city in which its meetings is held. This policy may be said to have been inaugurated at the second annual meeting of the Association held in Boston, in 1849. Dr. Jonathan Knight, of New Haven, was President of the preliminary Convention held in New York, in 1846, and in the Convention at which the Association was formed, held in Philadelphia in 1847, Dr. Nathaniel, was chosen its first President. Although Dr. Chapman was a resident of that city, we doubt whether any one will question the propriety of this choice, as he unquestionably stood at the head of the profession in the country. At the first annual meeting held in Baltimore, the President chosen—Dr. A. H. Stevens—was resident of New York. So that, in reality, the policy of choosing the President from among the profession of the city where the Association meets, was inaugurated in Boston, when Dr. John C. Warren was chosen. We must not be understood to complain of the propriety of the choice in any of these cases, for all the distinguished men who have occupied the post in question, were eminently worthy of the honor, under the rule by which they were elected. But with Dr. Hunt, of the *Buffalo Journal*, we think the time has come when the Presidency of the American Medical Association should not be measured by any local considerations, or bound by precedent, but should be an honor conferred by the profession of a nation, on its most distinguished member, whether he be a resident of the city or State where the meeting is held or not. We are glad to see that the medical press, and the profession generally, are ripe for a return to the original order of things, and it is especially honorable to the profession of Tennessee, the State in which the next meeting is to be held—for we have no doubt but the *Nashville Journal* represents the sentiments of the profession of that State—that they have come forward with a commendable eagerness, to have the proposed change made at the ensuing meeting at Nashville. The Presidency of our National Medical Association should be regarded as a mark of distinction conferred by the profession of a nation on one of its members, in gratitude for actual service rendered to the cause of medical science, and to the interests of the Association, whether he be a resident of a large city, or of some country hamlet.

With regard to the place of meeting of the Association, we think that the time approaches when the migratory character of the meetings should be in part, at least, done away with. We think that, so far, the plan has been a wise one, and when the Association shall have had one session in the southwestern section of the country, when the profession of all sections of the Union, except the extreme West, will have had an opportu-

nity of forming its acquaintance, as it were, some proper place should be chosen, where most of its sessions should be held.

Washington has been proposed as the most proper place, and it strikes us as eminently so, particularly if, as we think is possible, some arrangement can be made by which apartments in the Smithsonian Institution could be devoted to its uses. We would not have every session of the Association held at one point, but would have at least one out of every three held in other parts of the country. A writer in the *Penninsular Journal of Medicine* proposes that every third meeting should be held in Philadelphia, but we should prefer that they be held at the seat of the national government. We hope this question will come up for discussion at Nashville.—*Medical & Surgical Reporter*.

*The Medical Testimony of Drs. Willard Parker and Gilman in the Trial of Huntington.* Analysed by Dr. BRAUNLICH,\* of Brooklyn.

MOTTO: "Non omnia possumus omnes."

The extensive forgeries of Huntington, his trial and subsequent conviction, are of so recent date and so well known, as to render repetition unnecessary. However zealously and energetically the defense might have labored to free the prisoner of his criminal responsibility, no success could have ever crowned their laborious exertions, for the criminal acts of Huntington were too plainly, too evidently and glaringly established by the prosecution, to entertain the slightest hopes for their client.

In fact, nothing was left to them but the plea of insanity, so commonly resorted to under circumstances of so desperate and hopeless a character.

Drs. W. Parker and Gilman were called upon by the defense to inquire into the state of Huntington's mind. Having visited and conversed with the prisoner for about one hour and a half, the medical witnesses did not hesitate for a moment to declare the latter morally insane. Not only did the bench and jury disregard the said medical evidence entirely, but the former rejected it even with signal contempt. Let us inquire whether there was any ground for that action.

The arguments on which the medical evidence chiefly rested are as follows:

1. Huntington manifests a great nervous excitability by scrofulous constitution, in consequence of which the organization of his brain is deteriorated and himself has become insane.

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\* Doctor B. has been one of the most respected, and well known physicians for the treatment of Insanity in all its forms. He has been at the head of a large Lunatic Asylum in the Kingdom of Saxony for more than twenty-five years, and his writings on Psychology and Insanity placed him among the most distinguished men of that speciality, Germany possessed. The reason why the Doctor, in advanced age, emigrated to this country, was to obtain the commutation of the sentence of death against one of his beloved sons, who had taken a part in the revolutionary movements at Dresden.

2. Huntington gave away and squandered the large sums he had obtained by his fraudulent operations in the most senseless manner; proof: that he is insane.

3. Huntington manifested, when in prison, the greatest possible indifference in reference to his own condition, as well as to that of his family; proof: he is insane.

4. In the ancestors, especially in the father and mother of Huntington, some indications of insanity have shown themselves, consequently the insanity is hereditary.

The form of his insanity is that of moral insanity, a species of monomania, by which only the moral functions of the mental faculties are diseased, whilst the others are perfectly sound.

No. 1.—That the scrofulous constitution is apt to produce such disorganizations of the brain as to become the pathological basis of insanity, is as novel as any hitherto unheard-of assertion, a mere hypothesis, borne out neither by science nor experience. Had Drs. Parker and Gilman diligently inquired into the real condition of the insane, they would have found that in these unfortunate patients the scrofulous constitution is by no means prevalent. It is a fact well known to all physicians who have acquired a sufficient degree of knowledge and experience in the treatment of the insane, that no constitution itself predisposes to insanity, or to any particular form of mental disease. Hence the conclusion, that the preponderance of the scrofulous constitution of Huntington has directly or indirectly contributed to the insanity of the prisoner, is totally untenable.

No. 2.—Huntington gave away and lavished large sums in the most senseless manner. In this action the medical evidence of Drs. Parker and Gilman will recognise the proofs of his insanity. Had the Drs. been well instructed psychologists, they would have found the direct reverse. The first source of every crime is found in the presence of bad disposition and desires, which men, instead of suppressing, rather favor and nourish. With nutriment of bad dispositions and desires, they grow to passions and degenerate to vices and crimes. This is the ordinary course and development of every crime of whatever name it may be.

Was this the same case with Huntington? We can give no other than an affirmative answer. His inordinate longing after enjoyment, his tendency to squander, was the first proneness of Huntington that served as the primitive motives to his subsequent criminal acts. His circumstances were not qualified to indulge in them, and in order to satisfy his propensities he resorted to illegal means, thus becoming a criminal. By inquiring into the history of criminals, to which the literature of the "new Pitaval" furnished ample and inexhaustible material, the number of those is rather large that followed the course we have described, and that spent the results of their crimes, from forgery up to murder, in almost the same manner as Huntington.

If Huntington had amassed those sums which he fraudulently obtained, and lavished without indulging in any excess and debauchery whatever, the medical evidence would have been much more justified in pronouncing him insane, and consequently irresponsible. As there would have remained no conceivable object for his crime, he might have been laboring under "money-monomania," or with other words, under the insanity of avarice, for which it is well known the mere possession of money is the only object. But even this plea would not be tenable, unless borne



out by other unmistakable symptoms of insanity, for avarice is not insanity itself. Huntington, however, was not avaricious, but on the contrary he was a squanderer, and he followed therefore the ordinary course of criminals.

No. 3.—Huntington appeared in prison indifferent and apathic, as to his own future and that of his family. How the medical evidence can find in the apathy and indifference of a prisoner the proofs of insanity is only comprehensible in supposing that Drs. Parker and Gilman have had little or no opportunity at all to observe patients afflicted with insanity. Of hundreds of instances, idiots excepted, we have not found one who had not manifested the greatest uneasiness, restlessness, despair, ire, or violence, or grief and melancholy, when confined to solitude, however kindly and humanely they were treated. The calmness and indifference of Huntington signified therefore the reverse. The prisoner had, in consequence of his enormous expenditures, acquired a certain notoriety in the metropolis; hitherto he had been surrounded by friends and flatterers. His intellectual faculties had been incessantly put on the stretch in one direction; he had been constantly anxious to conceal his forgeries before the world. And at once his whole artificial construction, made up by sham, lie and fraud, broke down; his artificial character was "played out;" no hypocrisy could re-establish him to his former position; the veil fell from his true face, and there stood the defaulter in his criminal nakedness. It is so common in the history of criminals, that a moment like that relaxes the previous excitement into apathy and lethargy, and it is found particularly frequent with criminals belonging to the so-called "higher classes." Herein alone may be found the indifference of Huntington, and hereby again Huntington verified his standing on the common level with criminals.

No. 4.—By Huntington's uncles and aunt there have been traits of insanity; Huntington's mental disease is claimed to be hereditary. It cannot be denied that mental affections descend to the issue through generations; this is, however, much more the case with physical affections and diseases. Supposing that Huntington originated with parents afflicted to a certain extent with mental aberrations, it follows his predisposition to insanity, not insanity itself; just as little as an individual is considered epileptic that has descended from epileptic parents, before the disease has fairly appeared with an epileptic paroxysm; so with Huntington. There is no proof of his being insane, and as yet his alleged hereditary predisposition is merely gratuitous.

The form of Huntington's mental disease Drs. Parker and Gilman define as moral insanity. The nature of this remarkable disease Dr. Parker defines as follows: Moral insanity occurs in an individual who is afflicted with defective organization of some single and certain parts of the brain. The patient may be perfectly self-conscious, and be in the possession of his intellectual faculties; he may be able to discriminate between right and wrong, between good and evil, but in the affected parts of the brain, propensities, inclinations, and impulses may generate, which to balance and to counteract, the patient is not possessed of the required moral power. Justly can we say, "*difficile est satyra non scribere.*" The term of "moral insanity" is in itself a nonentity, a "*contradictio in adjecto*," and it is almost incomprehensible how a scientific man and well educated physician can use such a term without meaning, and use it under so important and consequential circumstances.

For every act an individual commits in a state of unsound mind, he is irresponsible, because his mental disease deprives him of his moral freedom, and as long as he is in the state of insanity, morality does not exist. If there was moral insanity, there would be necessarily an insane morality, which, however, as yet nobody has thought of. No criminal is at once consummated; he becomes so by degrees, neglecting to suppress by his moral freedom his original faults, propensities, and inclinations; they grow to vice, wickedness, and crime by constantly indulging in and promoting them.

Should the doctrines of Drs. Parker and Gilman gain ground, and be adopted by practical jurisprudence, influencing bench and juries, they would cause a terrible commotion in our criminal justice, and upset all our ideas hitherto entertained by civilized countries, with reference to right and wrong. Every criminal who does not possess the required moral power to restrain his vicious propensities, and had allowed them to develop themselves to vice and crimes, could have a right to set up the plea of moral insanity, and legal guiltlessness therefrom. Dr. W. Parker has hitherto enjoyed the reputation of a highly qualified surgeon, and I do willingly believe deservedly, but sure it is that he is no psychologist, that he is an entire stranger in the science of psychiatry. And hence he would have done by far better to resign medical evidence in cases referring to the soundness or affections of the mind, to men better acquainted with the subject, and more competent of judging it. It is at the expense of medical dignity and influence, if medical testimony is advanced which bench and juries are obliged to disregard, as they had to do in the case under consideration.—*American Medical Gazette*.

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*On the Value of Quinine as a Therapeutic Agent.* By MONTROSE A. PALLER, M. D., of St. Louis.

There is a tendency in the human mind to ascribe causation to mere antecedents—to presume that certain things bear the relation of cause and effect, when the true relation is antecedence and sequence only. From this common error medical science is by no means free. Disease departs from the human system, and the cure is ascribed to the remedies employed, when the true solution lies in the efforts of Nature. This is manifest enough when we reflect on the number of patients recovering under the ridiculous infinitesimal doses of the disciples of the Homœopathic practice.

This truth should always be present to the mind of the scientific physician. It inculcates on him the necessity of watching the operations of Nature, and of determining how much she is competent to cast off the elements of disease. Knowing the extent of her powers, we are prepared to assist her when she falters, and even, if necessary, to strengthen her well-directed endeavors.

There is also a tendency in the human mind to grasp with avidity any thing positive. Sciences which lead to certain results, are always pur-

sued with energy. Hence, the charm, which the study of mathematics possesses for many persons. Hence the desire of all physicians to master the subject of auscultation and percussion in the exploration of visceral diseases. Hence the study of the microscope, and the use of the speculum. In a word, to this desire for certainty we ascribe the anxiety of the physician to listen for sounds which convey correct information, and to inspect diseased organs for ocular demonstration. So too, in therapeutics, he seizes on a remedy which leads to known curative results; for this reason, quinine, with its well earned reputation in intermittent diseases, becomes a powerful and popular remedy for good and for evil. The physician, knowing its virtues wishes to enlarge its sphere of action—he administers it in various affections: the patient recovers, and that which is a mere sequence, becomes in his mind an effect.

We lay down these propositions as the result of our observations:

A. Quinine is an efficient remedy in intermittent diseases.

B. Many of these diseases require previous medication before it is proper to give quinine.

C. In continued diseases, whether they be fevers or inflammatory affections, quinine is of no value, except at their close, when a tonic is desirable, and then it is no better than many other vegetable bitters.

We need not insist on the value of quinine in intermittent and remittent fevers, and in intermittent neuralgia. In many such diseases nothing else is required; but it also happens, that when the large flabby and coated tongue denotes that there are elements in the system which ought to be thrown off, it is necessary that free purgation should first be resorted to: the condition of the tongue and the character of the alvine dejections affording the means of judging how far this is to be carried before quinine ought to be administered.

Quinine has its value in intermittent dysentery. In the fall season, when dysentery has both an inflammatory and a paludal element in its pathology, distinct intermissions become apparent. In this form of disease, the liver is much involved, and the indications are to restore the normal healthy actions of this organ, to subdue the colitis and to break up the exacerbations. Quinine alone is not apt to succeed—calomel and opium are slow of success; but a combination of each is attended with the happiest results. We do not mean that it is always proper to give them combined; it is better, first, to relieve the inflammatory element with calomel and opium, and then to give the quinine alone, or with opium if the latter be required to restrain the irritability of the bowels. Quinine has its value in intermittent pneumonia, an affection by no means of rare occurrence in this locality, and to be distinguished from ordinary pneumonia by the following characteristics: The rigor which ushers it in is more violent and longer continued, and is followed by intense heat, which, in a few hours, is succeeded by abundant perspiration. During this period there is great headache and sometimes intense lumbar pain; the pulse is rapid and soft, and not full and strong as in ordinary pneumonia.

Dr. Constant, practicing in the paludal districts of the department of Lôt, in France, says of this disease, that "there is never any purulent expectoration, these pneumonias never passing beyond the second stage, i. e., red hepatization, the pulmonary engorgement being rather a sanguineous congestion than inflammation. Auscultation and percussion

being of the highest value, often revealing the disease when unsuspected, a distinctive feature is the rapid passage from the first to the second stage of the disease, so that eight or ten hours after auscultation had revealed only a circumscribed *râle*, a whole side will be found hepatized. Under the influence of large doses of quinia this rapidly disappears giving way to returning subcrepitant *râle* during the remission of the fever, but returning again during the paroxysm, if this have not been cut short. The crepitant *râle* of the first stage is almost always moist, the *parchment-cracking râle* only having been heard for a short period, two or three times in more than sixty cases. It invades large surfaces rapidly, being heard posteriorly, sometimes laterally, but never in front. This form of pneumonia especially affects the posterior parts of the lower lobes. It especially appears in summer and autumn, while ordinary pneumonia prevails in spring and winter. It attacks all ages indiscriminately, except early infancy. The blood which flows from a vein is often below the normal temperature, very black and deficient in plasticity. After rest, its surface acquires a blueish color, especially if the patient is taking quinia. The clot is slow of formation and soft. The buffy coat is absent or very thin, and inclines to a blueish color. The condition of the blood, conjoined with the soft pulse and red hepatization, constitutes the chief distinctive sign of the affection.

"In this district, during winter, purely inflammatory pneumonia is met with; but in proportion to the high temperature and the production of malarial emanations, this inflammatory element is replaced by the paludal one. There are, indeed three forms met with. 1st. Simple pneumonia. 2d. Spring inflammatory pneumonia, complicated with intermittent paroxysm. 3d. Summer and autumn intermittent pneumonia. The first requires bleeding and antimony; the second, antiphlogistic treatment with quinia, given either simultaneously or subsequently; and the third, quinia in combination with external revulsives. These forms may still undergo further admixture, according as the inflammatory or paludal element prevails, requiring appropriate modification in the treatment."

In dysenteries of a continued type, that is, when they are merely inflammations, quinine is useless. In pure inflammatory pneumonia, no man in his senses ought to prescribe it. If, then, Quinine be valuable in these affections when they are of an intermittent type, that is to say, when they have a paludal element mixed with them, and it be pernicious when they are purely inflammatory and continuous, would not analogy teach us that the same result would follow in fevers? Paludal fevers are remittent and intermittent. Is such the case with typhus and typhoid fevers? We must not confound, as a slight abatement of the frequency of the pulse, a distinct remission. This is observed in many affections after the repose and quietude of night. If, however, we exclude the argument by analogy, experience will teach us. We have seen many cases of typhoid and typhus in our hospitals, in which the quinine treatment has been totally discarded, the rates of mortality decreasing in a greater proportion than they increased under its treatment. According to Dr. E. S. Smith, of this city, who has had ample opportunities to investigate these forms of fever both at home and abroad, the results of his experience are, that in the pure forms of typhus and typhoid, there being no paludal element, the administration of quinine is never attended with beneficial results. Typhoid fever, whose characteristic lesion is ulceration of the bowels, seems

to us, from statistics carefully gathered to be made worse by quinine, as the diarrhoea was universally made worse, the head symptoms increased, and the patient more prostrated after the administration than before. In this connection we will quote the words of Dr. Barclay, in the *London Medical Gazette & Times*, January, 1853. After giving the reports of the cases treated by him at St. George's Hospital, some with quinine, and some without quinine, he says:

"I must here distinctly state, that when I commenced this report I had no idea what the result would be, and, so far from believing it unfavorable, had hoped, that, excluding some unfortunate cases, the treatment of fever with quinine would prove rather more speedy, safe, and effectual, than by ordinary modes. I am sorry to be convinced that it has no advantages. It may be well to state in conclusion, that the prevalent type of fever has been what would be called 'typhoid,' not true 'typhus;' one or two had the aspect of congestive typhus, but wanted the purple-mottled rash."—*St. Louis Medical & Surgical Journal*.

*Intemperance in Europe and the East.* By Dr. J. OSCAR NOYES.

There is nothing truer under the sun than the old adage, *de gustibus non disputandum*. When I was a votary of the scalpel under Hyrtl, of Vienna, that great naturalist used to bemoan the loss of an immense collection of anatomical specimens, worth several thousand dollars, at the capture of the city by the Imperialists in 1849. The Croats drank off the alcohol in which the preparations had been preserved, and trampled the professor's household gods under their feet. The anatomical cabinet of Professor Ruysch and daughter, of Amsterdam, was so admired by Peter the Great, that he purchased it at the cost of 36,000 ducats. The preparations were shipped safely to Cronstadt, but in passing from the latter place to St. Petersburg the alcohol was spirited away, as in Vienna, and the collection totally ruined.

The Russians are in fact enormous consumers of alcohol. They send it against the Circassians as they have sent their Crabbes and Woronzoffs. The government derives a great part of its revenue from the excise levied upon intoxicating drinks. At the commencement of every term of the University of St. Petersburg, the servants (old soldiers who have distinguished themselves in the service of their country) are brought forward, and in their presence a portion of arsenic is introduced into every bottle containing an anatomical preparation. Even then they are required to take the oath of total abstinence. In Russia we might almost term alcohol "a fourth estate"—"a power behind the throne, stronger than the throne itself.

I think that travelers making a hasty tour of the continent are generally guilty of egregious errors in their estimate of the extent of intemperance in Europe, and its effect upon social institutions. They see comparatively few drunkards in the streets and, without caring to make a closer examination, are ready to affirm that intemperance scarcely has an existence—that France, Italy and Germany constitute the Utopia of mod-

ern Drinking. During a year's residence in Vienna, I had abundant opportunity to observe the extent to which alcoholic drinks were there used.

There are comparatively few drinking-houses after our model in the Austrian capital, but the *gast-hauser* serve as lager-beer saloons, and *liquors* are sold largely in the thousand and one cafés.

I am of the opinion that in Germany, a greater portion of the people indulge in alcoholic drinks, aside from wine and beer, than is the case among ourselves.

In the quarter of Vienna where I resided, one of the most genteel of the city, scarcely a Sabbath evening passed without drunken brawls, to end which, the interference of the police was often necessary.

Cases of death resulting directly or indirectly from intemperance, as reported in the journals, were of very frequent occurrence. I remember in particular, two remarkable instances of sudden death, occasioned by drinking large quantities of spirituous liquors.

The wards of the General Hospital contained about the same proportion of patients whose disease, hepatic and the like, had been induced by intemperance, as the hospitals in the United States.

Cases of delirium tremens were of frequent occurrence. One of the most common and obstinate forms of disease was distension of the stomach, caused by drinking inordinate quantities of wine and beer. So common was this, in fact, that some of the attending physicians used ordinarily to begin the examination of newly arrived patients by percussing them over the region of the stomach: I may state, *en passant*, that some of the moderate Germans boast of being able to drink a gallon of wine per day, and glasses of Teutonic ale too numerous to mention. Professor Oppolzer, a physician of world-wide celebrity, whose *cliniques* I attended, often deprecated the drinking habits of the Germans as highly deleterious to health and general happiness. And, in my opinion, the Viennese are more unhealthy and short-lived than the inhabitants of New York.

Hyrzl, by far the greatest anatomist living, often said to us, that by a single stroke of the scalpel, in the dark, he could distinguish the brain of an inebriate from that of a person who had lived soberly. Now and then he would congratulate his class upon the acquisition of a drunkard's brain, admirably fitted, from its hardness and more complete preservation, for the purpose of demonstration. As is well known, when the anatomist wishes to preserve a human brain for any length of time, he effects his object by keeping the organ in a vessel of alcohol. From a soft, pulpy substance, it then becomes comparatively hard. But the inebriate, anticipates the anatomist, while the brain remains the consecrated temple of the soul—while its delicate and gossamer tissues still throb with the pulse of heaven-born life. Terrible enchantment, that dries up all the fountains of generous feeling, petrifies all the tender humanities and sweet charities of life, leaving only a brain of lead and heart of stone!

Vienna is one of the most dissolute capitals of Europe. The low morality—the indecencies exhibited on every hand—the universal desecration of the Sabbath—half of the births in the city illegitimate—the troops of legalized prostitutes—a single lying-in hospital, to which a married female can scarcely procure admission, producing annually between four and five thousand bastards for death in infancy, or prostitution and conscription in later years. Would all these things be as they are if the Viennese were a temperate people? No one, I believe, can resist the conclusion, that in their drinking habits is the foundation of most of these evils.

Were the Germans to dispense with some of their wine, beer, and *liqueurs*, they would, in my opinion, become more clear-headed, sound-hearted, and virtuous. The despotic, anti-liberal tendency of their literature would cease to exist, and German infidelity—that muddy stream of presumption and pedantry—would, when viewed in clear light, become more repulsive and less injurious. With them the grosser appetites are suffered to

“— Drink up the liberal sap,  
The vegetating vigor of philosophy,  
And leave it a mere husk.”

Moreover, wine and beer, with music and the concomitant pleasures, all furnished at a cheap rate, are acknowledged to be important means in the hands of German tyrants for keeping their subjects oppressed. Casks of lager-beer, butts of wine, and fiddle bows—the props of despotism and the upholders of dynasties! This is not saying much for the gallantry and heroism of the people; nor, in my opinion, are they worthy of liberty who are willing to take in exchange for it the ravishments of wine and revelry. If it is melancholy to see an individual drowning his sorrows in wine, what is it to see cowardly nations dissolving their griefs and disappointments in the lethean forgetfulness of intoxication? And this is the case, not only in the Germanic States, but throughout Central and Western Europe—England in part excepted. It is in view of these facts that I consider the evils flowing from intoxicating drinks in Europe much greater than in the United States. The individual excess may not be so apparent and repulsive as in our own country, where there is more activity and more complete exhaustion; where men establish new empires, kill polar bears, and get drunk, with the same national enthusiasm. But Heaven preserve us from sinking into the Dead Sea of European intemperance, involving the loss of both morality and liberty!

Intemperance is astonishingly prevalent among the Slave tribes on the lower Danube. The Serbs drink their wretched *Slivovitz*, the Wallachs the vinegar-wine, the Greeks and Gipsies dissolve their sorrow in Raki—the vilest possible counterfeit of Brandy. The Wallachs also plant a plum tree at the head, and another at the foot of every grave, from the fruit of which they distill an odious but much-loved liquor: “a very literal illustration,” says Paget, “of seeking consolation from the tomb.”

The Koran is a judicious code of health applied on a magnificent scale. While we thank Mohammed for abolishing idolatry—wherever the faith of Islam is received—for destroying caste and combining a certain amount of individual freedom with the traditional despotism of the East, we have also to thank that “sanitary commissioner run mad” for restraining millions from the use of intoxicating drinks, in a climate where the temptation to use them is exceedingly great, and the consequences more fatal than elsewhere. Alcohol decimated the English army in the Orient.

The Koran forbids the use of intoxicating drinks. The law of Islam is, however, capable of elastic interpretation, and there are those among the faithful who contend that the interdiction is leveled against the abuse rather than the use of alcoholic beverages. Notwithstanding modern innovations, the great Moslems condemn their use, even in the form of remedies applied internally or externally, believing with the Prophet that “the sin committed in drinking wine is much greater than the advantage reaped from it.” Those who have made the pilgrimage to Mecca are most scru-

pulous on this point. Generally they will neither smoke, nor drink wine—neither buy nor sell it—nor the implements with which it is made, in order to live by such traffic. The sumptuary laws of the Koran are exceedingly strict. “Verily,” saith the Prophet, “the fires of hell shall roar like the lowings of a camel, in the bellies of such as eat or drink from vessels of gold and silver.” Unfortunately, however, there have been many departures from the early purity of the faith of Islam. The island of Scio was conquered by the Grand Vizier, Kipriuli, on account of the excellence of its wines. Even the dervishes—those pious showmen and cunning Jesuits of the East, are not proof against alcohol. Many of the Sultans have been addicted to intemperance, and the last Padisha, Mahmoud, died of *delirium tremens* actually—though of tubercular consumption officially. One of the first acts of Abdul Medjid was to pour into the Bosphorus several thousand bottles of wine surreptitiously introduced within the walls of the seraglio by the Kisler Aga. Many of the soldiers of Omar Pacha drank freely of Schnapps, a vile liquid invented, they declare, by the devil, long after the promulgation of the Koran, and therefore not forbidden. I do not remember, however, having ever seen more than half a dozen Moslems completely overcome by the influence of *French water*.

There is, doubtless, much intemperance in Turkey that escapes the eye of the traveler, but by no means so much as might be inferred from the following, taken from MacFarlane’s *Kismet*: “They (the Turks) have no sense of moderation. They may sometimes abstain, but they can never refrain. When they drink they invariably do it to excess. I never saw a Turkish gentleman sit down to his dinner with any appetite. The danger of dining with them, is getting fuddled before dinner commences. Their stomachs are deranged and vitiated, and the effects of this way of living are visible on the persons of most of them. I certainly did not expect to find that the habit had spread very widely among the common people; yet, with a few exceptions every Turk we met, in Europe or Asia, would drink Raki without any scruples and quite openly; and it was not often that they would refuse to partake of our wine. *Delirium tremens* was a malady by no means unknown among them.”

I once witnessed rather an amusing scene in Varna—[then a pandemonium of war and crime, of filth and wretchedness]—a scene of which only Western civilization can boast, and which was Oriental only in the accident of its locality. A few dissolute women who spoke the English language, but in whose person Venus and Bacchus had united their worst attractions, were engaged in a drunken brawl in the open street, with a number of Scotch and Irish dragoons. The French police were attempting to abate the nuisance, but their words were entirely lost on those abandoned courtezans, following in the track of glorious war. A crowd of long-bearded Mussulmans collected to gaze on that singular *apothecosis* of Western civilization in their midst. I shall not soon forget how those turbanned philosophers did shake their heads, and turn away in disgust, saying: “O Allah, the merciful, deliver us from the faults of our friends. By the beard of the Prophet, one Mussulman maiden is worth more than seven of the most beautiful daughters of the unbelievers.”

The use of opium is by no means so common among the Turks as I supposed it to be. *Theriakée*, signifying a lover of opium, is a term of reproach. The introduction of alcoholic drinks has doubtless had some



influence in diminishing its consumption, but the great majority of the Turks are satisfied with the milder stimulus of their favorite Mocha Nectar.

But now and then in the vicinity of the *Theriakée Tcharthee*, in Stamboul, may be seen a Turk whose pallid brassy countenance, emaciated features, sunken eye-balls, glistening in their sockets, plainly mark him as a smoker of the *Madjoon*. In some instances hideous boils break out upon the face and neck of the sufferer, and in others the limbs are paralyzed. Yet they declare that the mental ravishment produced by their favorite drug is cheaply purchased with these horrible sufferings. Those accustomed to its use frequently consume 100 grs. per day.\*—*Ohio Med. Jour. and St. Louis Jour.*

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\* De Quincy used 800 grs. of opium per day, and I attended a female in New York, suffering from a most painful cancer, in which 800 grs. were given daily for a period of three weeks.

## EDITORIAL AND MISCELLANEOUS.

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### THE NEXT SESSION.

As will be seen from the announcement, the next course of lectures in the Atlanta Medical College will commence on the first Monday in May, and from the information we are receiving, it is manifest that there will be a large class.

The facilities for teaching have been greatly increased since the last course, especially in the Anatomical department, a large supply of fine material having been secured, by which we mean to demonstrate that Anatomy can be as well taught here, as in any winter school.

There has been a continuance of the friendly spirit manifested upon the part of the Medical Colleges generally; in the outset of this enterprise, and at the same time, a continuance of hostile demonstrations from those who were an exception to the general course upon this subject, and we are sorry to say that the opposition to the success of this Institution has not been of that open and manly character which can at least be respected, if not approved.

In conclusion, we would remind those who are engaged in *secret* movements against this College, that there is the possibility of such a thing, as the sword which they have drawn, entering into their own hearts.

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### AMERICAN MEDICAL ASSOCIATION.

As will be seen from the circular of the Secretary, this body will convene in the City of Nashville, on Tuesday, the 5th of May, 1857. We feel a deep interest in the Association, and would urge upon all organizations entitled to representation, to send on delegates, that we may have really, what it purports to be, a *National* Medical Convention, not sectional or local, and not

to be influenced by cliques, or to be managed for the advancement of a few.

To the proceedings of such a body properly constituted and permanently established, we look for the elevation of the medical profession in many ways.

We heartily agree in the propriety of the proposition originating, we believe, with the Nashville Journal, that the President of the body should be selected, upon the ground of merit alone, without reference to locality.

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#### MEDICAL SOCIETY OF GEORGIA.

The Medical Society of the State of Georgia will convene in the City of Augusta, at 11 o'clock, A. M., on the second Wednesday in April, 1857, and we would urge the medical men of the State to be present upon the occasion. With as much medical talent and learning in proportion to population, as can be found in most of the States of the Union, we are doing almost literally nothing for the advancement of science, simply from the want of a general and thorough organization. We would unite with the Augusta Journal in the remark, that "every physician in the State should consider himself a member of the Society, and we hope, for the interests of the profession, that all will make an effort to attend." With the railroad facilities now found in our State, it will be an easy matter for every quarter to be fully represented in the Society at almost any point, and we hope the Society, in selecting their place for meeting each year, will have regard to every section, and thus excite and keep up the interest of all.

We would, in advance of the meeting, take the liberty of suggesting Atlanta as the next point, and shall confidently expect that the invitation (which will doubtless be presented by the members resident here) will not be disregarded.

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#### "THE SOUTHERN JOURNAL OF THE MEDICAL AND PHYSICAL SCIENCES."

We are pleased to note the fact, that this Journal is not "*dead*" but has only been in a state of suspended animation, and that

it has reappeared with new life and vigor. We can commend it as an excellent Journal and deserving success, which we hope it will receive in full measure.

The Journal is published in Knoxville, Tennessee, contains eighty pages—monthly, at \$3 a year, and edited by Richard O. Currey, A. M., M. D.,—evidently a gentleman of talent and energy.

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### MEDICAL COLLEGE OF THE STATE OF SOUTH CAROLINA.

We have received the Catalogue of the Medical College of the State of South Carolina, in Charleston, for the Session of 1856-7, from which we learn that they numbered in their class 245; we take great pleasure in recording the prosperous condition of the Institution.

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### *American Medical Association.*

The tenth meeting of the Association will be held at Nashville, on Tuesday, May the 5th, 1857.

All bodies entitled to representation in the Association, would very much further and facilitate its affairs by sending lists of their representatives at an early period to the undersigned.

### ARTICLE SECOND OF THE CONSTITUTION.

“The members of this institution shall collectively represent and have cognizance of the medical profession in every part of the United States, and shall hold their appointment to membership either as delegates from local institutions, as members by invitation, or as permanent members.

“*The Delegates* shall receive the appointment from permanently organized medical societies, medical colleges, hospitals, lunatic asylums, and other permanently organized medical institutions of good standing in the United States. Each delegate shall hold his appointment for one year, and until another is appointed to succeed him, and shall participate in all the business and affairs of the Association.

“Each local society shall have the privilege of sending one delegate to the Association, for every ten regular resident members, and one for every additional fraction of more than half this number.

"The faculty of every regularly constituted medical college, or chartered school of medicine, shall have the privilege of sending two delegates. The professional staff of every chartered or municipal hospital containing a hundred inmates or more, shall have the privilege of sending two delegates; and every other permanently organized medical institution of good standing shall have the privilege of sending one delegate.

"*The members by Invitation* shall consist of practitioners of reputable standing, from sections of the United States not otherwise represented at the meeting. They shall receive their appointment by invitation of the meeting, after an introduction from any of the members present, or from any of the absent permanent members. They shall hold their connection with the Association until the close of the annual session at which they are received, and shall be entitled to participate in all its affairs as in the case of delegates.

"*The Permanent Members* shall consist of all those who have served in the capacity of delegates, and of such other members as may receive the appointment by unanimous votes.

"Permanent members shall at all times be entitled to attend the meetings, and participate in the affairs of the Association, but without the right of voting; and when not in attendance, they shall be authorized to grant letters of introduction to reputable practitioners of medicine residing in their vicinity, who may wish to participate in the business of the meetings, as provided for members by invitation.

"Every member elect prior to the permanent organization of the annual meeting, or before voting on any question after the meeting has been organized, must sign these regulations, inscribing his name and address in full, specifying in what capacity he attends, and if a delegate, the title of the institution from which he has received his appointment."

Resolutions passed at the eighth meeting of the Association, held at Philadelphia:

*Resolved*, That no State or local society shall hereafter be entitled to representation in this Association that has not adopted its code of Ethics.

*Resolved*, That no State or local society that has intentionally violated or disregarded any article or clause in the code of Ethics, shall any longer be entitled to representation in this body.

*Resolved*, That no organization or institution entitled to representation in this Association, shall be considered in good standing, which has not adopted its code of Ethics."

Resolutions passed at the ninth meeting, held at Detroit:

"*Resolved*, That any new medical institution not heretofore represented in this body, be required to transmit to the Secretary, with the credentials of its delegates, evidence of its existence, capacity and good standing."

Medical presses throughout the Union are respectfully requested to copy the above resolutions at their earliest convenience.

ROBT. C. FOSTER,  
Secretary Amer. Med. Ass., Nashville, Tenn.

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### *A Convention of Medical Editors.*

The *Southern Journal of the Medical and Physical Sciences* proposes that a convention of the editors of the American medical press should be held during the forthcoming sitting of the American Medical Association at Nashville, "to deliberate upon all subjects pertaining to the support and progress of medical periodical literature." It is a well-known fact, that medical journals in this country do not, as a rule, receive that support from the profession to which they are entitled. A large number of subscribers take their journals regularly without paying for them, or without paying promptly; some from inadvertence, but many, we fear, deliberately. One of the objects of the proposed convention is to institute a reform in this respect, and enable the conductors of the periodical press, not only to be indemnified from loss, but by a reasonable pecuniary return for the expenditure of time and talent to improve the quality of our medical periodical literature, and thus indirectly to elevate the standard of the profession. The effect of good medical journals upon the progress of medicine can hardly be over estimated. As the editor of the *Southern Journal* justly remarks, without them the profession would be "an army without banners, or a ship without sails." It is only by means of a constant interchange of new ideas, the publication of new discoveries, the promotion of friendly feelings throughout the scientific world, that science can advance with those rapid strides which render the present age so remarkable.

It may seem a very easy thing to obtain from subscribers to medical periodicals the small amount which is annually due from them. Experience has shown that in many instances this is not the case, and we suppose that every journal has a certain number, some a large number, of names on its lists, who are not ashamed to receive the periodical without ever paying for it, besides others whose payment is withheld so long, or obtained with such difficulty, as to make it no adequate compensation for the expense incurred by the editor or proprietor. We are therefore glad to see the suggestion of the *Southern Journal*, and we hope it will be carried into effect. If the majority of the editorial corps will agree to adopt the cash system, and refuse to supply subscribers who are in ar-

rears, until all accounts are settled, we are confident that there will be no reason to regret the reform. The only subscribers lost will be those who do not pay, and hence the result will be an actual gain to the proprietor; while if all journals will unite in this plan, the delinquents will not be able, as is sometimes the case, to supply themselves by running in debt for another periodical. We think a convention of editors might also have a favorable effect upon our medical periodical literature, by deliberating upon the best means of improving the character of our journals, by obtaining a larger amount of valuable original matter, both on the science of medicine and on the ethics of our profession. It is surprising to see how small a space is generally devoted to original articles, and how inferior many of these are in quality. Many of our medical periodicals are chiefly composed of extracts from other journals, and we could name one, at least, whose short existence was almost sustained by matter transferred from our own pages. The subject of *advertisements* is one which should come under the notice of the convention; and considering the profit yielded by this department, and the importance of its effects upon the character of our profession, it is surprising that so little should have been said on this point.

We have briefly referred to a few of the topics which would naturally come before the editorial convention. There are several others which would also form appropriate subjects for discussion, should the proposition of the editor of the *Southern Journal* meet with favor, which we sincerely hope will be the case.—*Boston Med. & Surg. Journal*.

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### *Effects of Chloroform on Uterine Contractions.*

In the January number of the North American *Medico-Chirurgical Review*, we find some very interesting remarks from the pen of Prof. John Hardin on the subject of "Transverse Presentations of the Fœtus." The following, however, has attracted our especial attention, both on account of its importance and its being altogether contrary to our own experience. While treating of remedies to be resorted to for the purpose of relaxing the uterus before undertaking version, the author says—"Fortunately, modern investigation has brought to our knowledge a remedy, prompt, efficient, and so nearly safe that we do not hesitate to employ it in preference to all others. This remedy, I need scarcely say, is chloroform, used to the extent of producing as full and complete anæsthesia as would be required for amputating a limb. It holds the uterine action

in complete abeyance, so that we may calmly and considerately employ any mode of changing the presentation of the child that we may desire."

Now, we are fully aware that the author does not stand alone in thus believing in the power that chloroform possesses over the contractility of the uterine muscular fibre. Even Simpson himself, the father of "chloroform in midwifery," speaks of the deep state of anæsthesia suspending uterine action, or even causing relaxation of the organ. If it be true, that the organ can be made thus safely to relax its hold on the fœtus while we perform version, either cephalic or podalic, then are we surely possessed of a remedy which robs "cross births" of half their terror. Whether all this is true or not we will not now say, preferring to await a little more experience on the subject. Thus far, however (and we claim *some* experience in such matters,) we have never met with a case wherein even the most complete state of anæsthesia has done more than delay the *recurrence* of the *expulsive* efforts of the uterus: whenever our hand has been introduced under such circumstances, we have found the normal tonic contractions of the organ on the child altogether unaffected. In other words, our own observation teaches us, that under the state of complete anæsthesia the womb is closely applied to the ovoid form of the fœtus, and that any effort to perform version arouses the organ as fully as in a case where no chloroform has been administered.

[*N. O. Med. News & Gaz.*

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*Dr. Livingston.*

Dr. Livingston, who lately returned to Great Britain, from an absence of nearly seventeen years in the wilds of South Africa, is undergoing the ordeal of a degree of public attention, quite unusual with our phlegmatic neighbors. But he well deserves it and tenfold more. As an example of a persevering and self-sacrificing man of science and a zealous missionary, he has probably no equal in the ranks of the Christian Church, or in the medical profession. In addition to all, his modesty in positively refusing to publish to the world the details of the dangers he has encountered, is equally rare, and although carried to an unnecessary extreme, forms an agreeable contrast to the romantic accounts of some professedly scientific travellers, whom we might name. In one of his public addresses, he, however, mentioned incidentally that for *sixteen years* he had not an opportunity of conversing in his



native language, a circumstance which is of itself significant to our minds of positive suffering seldom endured, even within the walls of a state prison. His contributions to scientific knowledge have not yet been given to the public, but doubtless will be ere long, when we look for some most interesting additions to our present slender information, concerning the diseases of the countries through which he traveled. In his address before the London Missionary Society, he stated that some of the interior districts of Africa are perfect sanatoria, and among the pure negro family, many diseases common in Europe are almost unknown. Small-pox and measles had not been known for twenty years, and consumption, scrofula, cancer, and hydrophobia are seldom heard of.—*North American Med. Chirurg. Review.*

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*Contest between Mr. Fergusson and Mr. Syme.*

Now that the smoke of the contest, conducted, on the one hand, by Mr. Fergusson, and on the other by the equally distinguished Mr. Syme, in regard to the manner in which the late Mr. Liston was in the habit of holding the knife in the operation of lithotomy, has passed away, it turns out as we predicted, that the Scotch professor has gained the day, and the victorious party are having a gay time over the defeat of the Queen's surgeon. The last and decisive charge was made by Mr. Pirrie, whose array of facts in proof that Mr. Liston held the scalpel in the underhand position, as represented in the various wood-cuts which appear in the pages of his own, Mr. Pirrie's, Mr. Miller's, and Mr. Druitt's books on surgery, is perfectly overwhelming.

But hardly is this *great* battle of the knives decided before another equally honorable to the distinguished parties involved is begun. Mr. Ramsbotham, who, however, notwithstanding his high position in the obstetric world and the adaptative nature of his calling to the annually recurring professional wants of her Majesty, has not we believe, the entrée of the royal chamber, charges publicly upon Mr. Churchill, a brother accoucheur, a theft committed some twelve or fifteen years ago. The articles said to be stolen are certain wood-cut illustrations, which, without leave or license, or even an acknowledgment, Mr. Churchill was wicked enough to copy from Mr. Ramsbotham's book on midwifery, published about that time. The war has just begun, and how it will end the world will no doubt in due time be informed. In the meantime, speculation is rife, and the intensest interest is felt to know the result.—*North American Med. Chirurg. Review.*

*When is a Medical Teacher or Practitioner Superannuated?*

In the organization of one of our western medical schools some years ago, the board of trustees of the institution declared, by the enactment of a statute, that when a professor has attained the age of sixty-five years he is no longer qualified to teach, but must consider himself superannuated, in spite of whatever testimony he may have to the contrary. In Paris, a law prevails in regard to hospital physicians and surgeons, similar in its bearing, but even still more arbitrary and unjust. since its limit is five years less. Under this regulation MM. Paul Dubois, Cruveilhier, Bonneau, and Hervez de Chégoin, having reached the fatal sixtieth year, retired from their respective posts at the beginning of the present year. M. Paul Dubois continues, however, as Professor of Clinical Midwifery to the Faculty at the Hôpital des Cliniques; it is at the Maternité that he will have a successor.—*Id.*

*Leeches.*

In the travels of Joseph Dalton Hooker, M. D., through Sikkim and Nepaul Himalayas, the following statements occur:—

“Leeches swarmed in incredible profusion in the streams and damp grass, and among the bushes: they got into my hair, hung on my eyelids, and crawled up my legs and down my back. I repeatedly took upwards of a hundred from my legs, where the small ones used to collect in clusters on the instep; the sores which they produced were not healed for five months afterwards, and I retain the scars to the present day. \* \* \* \* Another pest is a small midge or sand-fly, which causes intolerable itching and subsequent irritation, and is in this respect the most insufferable torment in Sikkim; the minutest rept in one's clothes is detected by the acute senses of this insatiable blood-sucker, which is itself so small as to be barely visible without a microscope. We daily arrived at our camping ground, streaming with blood, and mottled with the bites of peepsas, gnats, midges, and mosquitoes, besides being infested with ticks.” (Vol. II, p. 18.) “A large tick-infests the small bamboo, and a more hateful insect I never encountered. A traveler cannot avoid these insects coming on his person (sometimes in great numbers) as he brushes through the forest; they get inside his dress and insert the proboscis deeply without pain. Buried head and shoulders and retained

by a barbed lancet, the tick is only to be extracted by force, which is very painful. I have devised many tortures, mechanical and chemical, to induce these disgusting intruders to withdraw the proboscis, but in vain."—(Vol. I, p. 166.)—*American Journal of Pharmacy*.

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*Researches on the Cause of the Fluidity of the Blood.*—Dr. B. W. Richardson, in a paper read before the chemical section of the British Association for the advancement of science, commenced by giving a historical sketch of the various hypotheses which had been formed to account for the fluidity of the blood and the phenomena of coagulation. He then related his own investigations, which had led him to the discovery that ammonia is a constituent of the blood, and that on its presence the solubility of fibrin, and therefore the fluidity of the blood, is dependent. The numerous experiments performed by the author were described: they may be thus briefly classified: 1. By causing the vapor arising from coagulating blood to pass through another quantity of blood, drawn as nearly as possible at the same time and from the same animal, the coagulation of the latter is suspended so long as the current of vapor is kept up. 2. By driving the vapor of coagulating blood into pure hydrochloric acid, and afterwards treating with chloride of platinum, the characteristic yellow crystals of ammonio-chloride of platinum are procurable. 3. On collecting a large quantity of freshly-drawn blood in a wide-mouthed jar, and placing over a cover, to the interior of which is fixed a slip of glass moistened with hydrochloric acid, the glass becomes covered with microscopic crystals of chloride of ammonium. 4. If fibrin removed from blood be carefully dissolved in a weak solution of ammonia, and again added to the serum and red particles, coagulation may be induced. The result arrived at was, that the phenomenon of coagulation depends essentially on the evolution of ammonia from the blood; and this gives an explanation of the modifications observed in the process of coagulation under various physical conditions. In concluding his paper, Dr. Richardson pointed out that ammonia, in combination with carbonic acid gas, is a constant constituent of the air expired in the breath. The presence of ammonia in the animal economy, and its evolution in respiration, was of interest in that it connected more closely the link that exists between the animal and vegetable worlds. But the subject was of the greatest importance in relation to the causes, the nature, and the treatment of various diseases.—*Proceedings of British Assoc. for Advancement of Sciences*, 1856.

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## SUBSCRIPTIONS RECEIVED.

Drs. S. S. Satchwell, N. C., 1st and 2d vol.; T. A. Boddie, Ga., 2d vol.; W. J. Hayes, Ala., 2d vol.; E. C. Hawes, Ga., 1st and 2d vol.; J. G. Broyles, Miss., 2d vol.; P. E. Jennings, Ga., 1st and 2d vol.; N. A. Moreland, Ga., 1st and 2d vol.; Wm. Matthews, Ga., 2d vol.; J. M. Darnall, Ga., 2d vol.; R. Search, Ala., 1st and 2d vol.; J. B. Fuller, Ala., 2d vol.; M. A. Leake, Ga., 2d vol.; Leonard Morgan, Ga., 1st and 2d vol.; Lewe Sessions, Ga., 1st and 2d vol.; Milton O. Stribling, Ga., 1st and 2d vol.; J. F. Woodbury, Ga., 2d vol.; E. C. Hood, Ga., 2d vol.; R. Mitchell, Tenn., 2d vol.

## METEOROLOGICAL OBSERVATIONS FOR FEBRUARY, 1857, AT ATLANTA, GA.

| MARCH. | THERMOMETER. |         |         | BAROMETER. |         |         | WIND. | REMARKS.                             |
|--------|--------------|---------|---------|------------|---------|---------|-------|--------------------------------------|
|        | 7 A. M.      | 2 P. M. | 7 P. M. | 7 A. M.    | 2 P. M. | 7 P. M. |       |                                      |
| 1      | 42           | 60      | 50      | 29.50      | 29.55   | 29.75   | W.    | Windy—Fair.                          |
| 2      | 24           | 36      | 24      | 29.55      | 29.62   | 29.55   | W.    | Windy—Fair.                          |
| 3      | 18           | 43      | 26      | 29.57      | 29.60   | 29.55   | W.    | Hazy.                                |
| 4      | 25           | 60      | 40      | 29.60      | 29.62   | 29.55   | S. E. | Hazy.                                |
| 5      | 38           | 44      | 40      | 29.42      | 29.37   | 29.37   | W.    | Cloudy—Rain $\frac{1}{8}$ in.        |
| 6      | 25           | 38      | 28      | 29.50      | 29.60   | 29.65   | N. E. | Fair.                                |
| 7      | 20           | 31      | 29      | 29.67      | 29.77   | 29.72   | N. W. | Fair.                                |
| 8      | 26           | 44      | 37      | 29.70      | 29.77   | 29.67   | N. W. | Fair.                                |
| 9      | 34           | 40      | 34      | 29.57      | 29.55   | 29.57   | S. E. | Cloudy—Rain 1-16 in.                 |
| 10     | 20           | 45      | 40      | 29.51      | 29.65   | 29.55   | S. E. | Fair.                                |
| 11     | 34           | 39      | 38      | 29.47      | 29.50   | 29.57   | W.    | Cloudy—Rain $\frac{1}{8}$ in.        |
| 12     | 20           | 43      | 36      | 29.65      | 29.82   | 29.80   | N. W. | Fair.                                |
| 13     | 30           | 28      | 28      | 29.75      | 29.65   | 29.57   | E.    | Cloudy, Sleet, R'n $\frac{1}{2}$ in. |
| 14     | 28           | 38      | 30      | 29.57      | 29.72   | 29.72   | E.    | Cloudy.                              |
| 15     | 32           | 54      | 46      | 29.72      | 29.72   | 29.70   | S.    | Hazy.                                |
| 16     | 30           | 50      | 42      | 29.65      | 29.67   | 29.70   | S. W. | Fair.                                |
| 17     | 36           | 64      | 50      | 29.65      | 29.72   | 29.72   | W.    | Fair.                                |
| 18     | 48           | 62      | 46      | 29.67      | 29.53   | 29.53   | W.    | Cloudy—Rain $\frac{1}{4}$ in.        |
| 19     | 28           | 44      | 38      | 29.55      | 29.60   | 29.57   | N. W. | Fair.                                |
| 20     | 36           | 64      | 54      | 29.60      | 29.77   | 29.67   | S. W. | Fair.                                |
| 21     | 50           | 64      | 48      | 29.77      | 29.88   | 29.82   | S. W. | Fair.                                |
| 22     | 50           | 64      | 56      | 29.90      | 30      | 29.92   | W.    | Fair.                                |
| 23     | 54           | 70      | 62      | 29.92      | 30      | 29.90   | N.    | Hazy.                                |
| 24     | 50           | 76      | 60      | 29.82      | 29.92   | 29.77   | S. E. | Fair.                                |
| 25     | 50           | 64      | 52      | 29.80      | 29.82   | 29.67   | S.    | Hazy.                                |
| 26     | 40           | 60      | 54      | 29.67      | 29.75   | 29.65   | W.    | Fair.                                |
| 27     | 54           | 66      | 54      | 29.65      | 29.70   | 29.62   | W.    | Fair.                                |
| 28     | 44           | 64      | 48      | 29.55      | 29.75   | 29.62   | S. W. | Hazy.                                |
| 29     | 40           | 62      | 52      | 29.65      | 29.77   | 29.72   | N. W. | Fair.                                |
| 30     | 36           | 58      | 46      | 29.72      | 29.90   | 29.82   | N. W. | Fair.                                |
| 31     | 40           | 64      | 52      | 29.85      | 29.87   | 29.72   | N. E. | Fair.                                |

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[No. 9

ORIGINAL COMMUNICATIONS.

ARTICLE I.

FOREIGN CORRESPONDENCE.

By W. F. WESTMORELAND, M. D., Professor of the Principles and Practice of Surgery in the Atlanta Medical College.

PARIS, FEBRUARY 10TH, 1857.

*Dear Doctor* :—I visited, this morning, the wards of M. Chassaignac at La Riboisière, and, although I had a fatiguing morning's walk--the hospital being situated in the extreme northern part of the City, some four miles from the School of Medicine,—I was fully repaid for my trouble.

M. Chassaignac is the inventor of the *écraseur*, an instrument alluded to in a previous letter. Upon this instrument, its application, and the advantages of the dry incision, or the incision without hemorrhage, (*incision sèche*,) he has recently published a work of 550 pages. The *écraseur* which he uses in almost every operation, when it is possible to circumscribe the lesion with the noose of the chain, consists in a chain with links similar to the chain saw; in fact, is the chain-saw without the teeth; the ends of the chain are passed through a stout bar, accurately filling the openings made for their passage, and attached by means of hooks to a smaller bar which slides in the greater. The small bar to which the chain is attached, is moved by means of a screw, so that the operation, after adjusting the instrument, may make constriction upon

any substance placed in the noose of the chain, and to any desirable extent, by merely turning a screw. It will be readily seen that this instrument acts upon the principal of the original *serre-nœud*, it being, however, much stronger, and more conveniently managed—dividing the tissues by constriction; but instead of a few hours or days, as by the *serre-nœud*, the section is accomplished in a few minutes, and without the loss of more than a few drops of blood, however vascular the part.

The principal lesions in which he uses the *écraseur* are: hemorrhoidal tumors, prolapsus of the rectum, polypus of the rectum and uterus, all lesions requiring a partial or complete amputation of tongue, fistula in ano, cancer of the rectum, cancer of the neck of the uterus, varicocele, sarcocele, phymosis, lesions requiring amputation of the penis, sub-cutaneous tumors as lipoma, erectile tumors, naso-pharyngeal polypus, &c., &c. Substituting for the bistoury, as will be seen in quite the majority of operations, his favorite instrument.

He performed, this morning, three operations with the *écraseur*, for hemorrhoidal tumor, cancer of the umbilicus, and varicocele, and I am forced to acknowledge, that in each the operation was very satisfactory. The hemorrhoid tumor was small and external; it was removed in less time than two minutes without the loss of a drop of blood. M. Chassaignac assured me that it was the usual result of the operation, even when the tumor was interu and of large size, the only difference, the large tumors requiring more time. The umbilical cancer, which I should have had many scruples in attacking with the bistoury, he transfixed by passing pins between its hardened base and the peritoneum, so that the instrument would not come in contact with this membrane, passing the chain of the *écraseur* above the pins. The extirpation of the tumor was accomplished in about ten minutes, and without the loss of but a few drops of blood. It would appear, without reflection, that after the section there would appear a large gaping wound the size of the base of the tumor, which was not the case. Before the tissues are divided, there is always a pedicle or neck formed, which exists after the section, the approximation of the divided tissues being so perfect, in quite a number of cases, as to prevent the contact of air with the wound, thus approaching the subcutaneous section. Pins

were passed through the constricted neck and secured by a ligature to prevent the possibility of the retraction of the skin.

The varicocele was, as is usual, upon the left side, the veins being of large size. The operation was as follows: He first passed three pins behind the veins, as in the ordinary operation by the pins and ligature, the pins being from a third to half an inch apart, he next passed a ligature around the three pins, not as in the operation above alluded to, but embracing the three pins at the same time, the ligature was tightened forming a neck or pedicle behind the pins, thus separating that portion of the varicose veins embraced by the ligature from the artery and spermatic cord. The chain of the ecraseur was now placed around the neck thus formed, and the whole extirpated. From an inch to an inch and a half of the veins were excised. No hemorrhage. The skin was allowed to retract so that the point occupied by the veins would fill up by granulations, forming a cicatrix which would effectually prevent their reproduction.

M. Chassaignac has performed this operation several times with success. I examined, in his wards, this morning, a case upon which he had performed the same operation two weeks ago. The wound is granulating beautifully. No accidents had occurred.

During the clinic he presented several patients upon whom he had operated with the ecraseur for different diseases, and all with satisfactory results.

There are several recent improvements upon the original instrument, one in which wire is used instead of the chain, others differing only in the form and application of force to the chain; I doubt very much, however, whether any one of them have any claims over M. Chassaignac's instrument. It is more than probable, that, like every thing else, when first introduced either in medicine or surgery, too much is claimed for this instrument—that it is often used in cases where it is not applicable, or at least where the bistoury would give better results. It is, however, a most valuable addition to our list of surgical implements, and in several diseases, has superior claims to any other method of operating.

M. Chassaignac has introduced a new plan of treating abscesses, for which he claims as much or, perhaps, more than

he does for the *écraseur*. This new method of treatment consists in a system of drainage by means of small India rubber tubes pierced by numerous holes. These tubes are passed through the abscess by means of a trocar and canula for the purpose, the number of tubes, depending upon the size of the abscess; after the canula is withdrawn the ends of the tubes are knotted to prevent their escape from the abscess, giving them the appearance of an ordinary seton. The pus, as fast as formed, enters the tube by means of the numerous holes by which it is pierced, and is discharged externally, thus obliterating the cavity by permitting the walls of the abscess to contract upon itself. He has no fears of the introduction of air and the decomposition of the pus, as in all his experiments he has never witnessed such an accident. He adopts this plan of treatment as well in the acute, as in abscesses by congestion. I saw in his wards, this morning, between fifteen and twenty cases under treatment—five or six were abscesses of the mammary gland. He passed, this morning, three tubes through an enormous abscess of the lumbar region symptomatic of Pott's disease of the spine. I learn that he is preparing a report to present to the *Société de Chirurgie* with the rise of three hundred cases treated by this method. He treats hydrocele in the same way. There are at present, in his wards, two cases with the tube above described, passed through the tunica vaginalis.

I examined a patient this morning, from whom he had amputated a leg with nitric acid. The operation was performed in November last. The wound has healed beautifully. No one, by an examination of the stump, would suspect the mode of amputation. It required five applications of the acid—the first two being excessively painful. The applications were made twice a day, making two days and a half. M. Chassaignac says that the acid may be applied every two hours, thus completing the amputation in less than twelve hours. It is evident that in America, where we amputate with such impunity, when death from amputation is an exception to the general result, we would never think, for a moment, of adopting a method so tedious, and so excessively painful to the patient. In Paris, however, it is different. Quite the majority of patients who submit to an amputation in the hospitals of this



city, die in from three to ten days after the operation, of purulent infection. In the larger amputation, as of the thigh, &c., recovery is an exception to the general result. This fatality appears to be confined strictly to the city, as at an hospital at Versailles, only twelve miles of Paris, amputations are followed by the most favorable results. The same of the hospitals in the various provinces in France. I saw a patient die, a few days ago, in the wards of M. Nelaton, from an amputation of the index finger. In speaking of the death of this patient, M. Nelaton discussed to some extent the cause of this very fatal accident. He is of the opinion that there should be erected, near Paris, a hospital for the reception of patients requiring amputation—that amputation should not be performed in the city, except under peculiar circumstances. Surgeons, there are to some extent, excusable for experimenting, as the discovery of any method by which amputations could be performed without the risk of being followed by that terrible accident Pyæmia, would be one of the greatest additions to modern surgery, at least so far as the city of Paris is concerned.

Yours ever,

W. F. WESTMORELAND.

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## ARTICLE II.

*On some of the Medicinal Properties and Therapeutical Applications of Chlorate of Potassa.* By J. S. WEATHERLY, M. D., Montgomery, Ala.

In compliance with a long neglected promise, of furnishing an occasional article for the columns of your Journal, I proceed to offer a few wandering thoughts upon an article of the *Materia Medica*, whose merits, as a remedial agent, I am inclined to think are not properly appreciated by the profession. I mean the Potassæ Chloras. Its name carries with it the chemical constituents of the substance. The chemical composition of this article would leave us to ascribe alterative virtues to it—such as are claimed for it by those who have tested

its virtues. In offering a few remarks upon this article, I do not expect to startle the medical world with any thing new or original, neither with the idea that I am advocating a specific for any disease. Neither do I wish to lead any one into error, by presenting undigested theories for their consideration. For the profession is already overshadowed by crude theories and fancies, emanating from the brains of those whose patients happen to get well, with or without the influence of a certain remedy, when, forthwith is heralded to the medical world, a specific. But, lo! when the vaunted specific comes to be tried by others, we hear muttered anathemas, and curses long and deep from the disappointed ones, against the unfortunate discoverer of a specific. Hence, it is, that much, very much, that is written for Medical Journals is doomed to pass unread, or to be consigned to the "tomb of the capulets," as being unworthy of remembrance. It may be so with this article. And, if so, I say, "so mote it be;" for I, for one, am anxious to see medical facts advanced, and sustained by philosophic reason, and confirmed by practical experience. My attention was first particularly attracted to this article by an essay, by Professor Frost, of Charleston, in the Charleston Medical Journal, several years ago. He recommended it for continued and remittent fevers. Upon a farther examination, I found it highly extolled by several German and English authors of high reputation. Numerous theories were advanced to account for its actions, but as I have no desire to engage in vague speculations, and no particular theory to advocate, I shall leave this part of the subject for minds better adapted to hypotheses than my own. I have used the remedy, and have thought I derived advantage from its use. But as the class of diseases, for which I have generally employed it, are not such, as yield positive results to any remedy, it is difficult for me to say how much benefit I have derived from its use. The diseases for which I have employed this remedy, with apparent good effects, are Typhoid Fever, Scarlatina and Croup, and in all diseases attended with a low form of inflammation and ulceration of the mucus membrane of the intestinal canal.

I have used it in all stages of typhoid fever, generally with the view of its action upon the mucus membrane of the in-

testine. How it prevents ulceration, or cures it when it occurs, I am not prepared to say, but that it will do it, I think amounts almost to a certainty. Any one who has witnessed its prompt action in arresting ulceration of the mouth and fauces, would naturally infer, that it would have the same effect upon the same membrane in a different situation. It follows then, that the indications for its use in fevers, are such as show a tendency to inflammation and ulceration, where the tongue is dry and red, with sordes upon the teeth, a quick and feeble pulse, where an alterative of some kind is necessary, it may generally be used with benefit.

In Scarlatina, especially, the malignant variety attended with ulceration and gangrene of the fauces, it is a remedy not only internally, but as a gargle. Besides its action upon the inflamed mucus membrane, it also acts as an alterative to the blood. How it acts as a depurating agent upon the blood, I am not prepared to say. But that it is especially adapted to diseases of blood poisoning, I think I am warranted in saying, from experience. It may be by supplying oxygen, or the chlorine, may act as a purifying agent as it does out of the system. I will here give a case of croup which was treated by me several years since, which will illustrate its effect upon deficiently arterialised blood. The child had been suffering from croup for two or three days previous to my seeing it, and had been under the influence of nauseants and emetics all the time. When I saw it, it was gasping for breath, the face and lips blue and torpid; the whole surface cold and clammy; pulse scarcely perceptible; in fact, all the symptoms indicating a speedy termination of life. Not being prepared to perform tracheotomy—for I really thought that the only chance of life—I determined to try the chlorate as a dernier resort; thinking that I might probably act on the blood with it, and also counteract the peculiar condition of the mucus membrane of the larynx and trachea. I commenced with one teaspoonful of the saturated solution every hour; and very much to my surprise, and to the gratification of the parents, the child was convalescent in about four hours. It may have been chance, but if it was, when and how are we to determine when a remedy does act beneficially? A few words as to its admin-

istration and I am done. I usually make a saturated solution of the chlorate in aqua pura, and administer one tablespoonful to an adult every two or three hours, according to circumstances.

I will now conclude this hasty article. I have given it to you in my own words, and with my own ideas, not having the leisure or desire to indulge in long or numerous quotations for the purpose of filling out my paper.

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### ARTICLE III.

*Removal of a piece of Gun Barrel from the outer surface of the Third Rib.* By A. W. GRIGGS, M. D., Newnan, Ga., April 10th, 1857.

PROFESSOR LOGAN,

*Dear Sir,*—On the morning of the 16th of September last, I called in the office of Dr. L. W. Pierce, about six miles from Newnan, on the road leading to Moore's Ferry. Soon afterwards Mr. J. G. Giles, of Carroll, the adjoining county, entered the room, having walked several miles from home beyond the river to consult my friend in reference to an injury which he had received, on the night of the 5th of December, 1855, by the explosion of a shot gun, the contents of which he was attempting to discharge at an owl that was among the poultry. At the fire of the gun the barrel split in half, longitudinally from the breach, to the extent of about five inches, and the left half was blown away, inflicting a severe wound on the left side of the chest, a few inches in front of the axilla. He informed us that a couple of medical gentlemen were summoned, and after examination, the edges of the wound were drawn together by adhesive straps, and he was left. We were informed that the union by the first intention took place without any difficulty, but that a dull aching pain between the axilla and the sternum gave the patient but little rest. That in the course of a few weeks, a hard and extremely painful

ridge in that direction formed, which finally pointed and opened an inch to the sternal side of the original cut, and a great quantity of thick purulent matter was discharged. That lately; a second opening had appeared, half an inch to the right of the former. The patient began to suspect that something was concealed in the wound. Upon slight examination, we thought that there was either caries of the rib, or a piece of gun barrel lodged beneath the pectoral muscles, or probably both. I introduced a probe into the fistulous opening next to the axilla, and moved the point gently forward and downward, it infringed directly against some smooth slick metallic substance. The probe being withdrawn, it was then passed into the same opening and out at the other. Mr. G. consented that we might make a short incision down upon the probe, which was accordingly done, but being insufficient for our purpose, the incision was continued toward the axilla to the distance of an inch. Whereupon we discovered a large piece of iron, which he was anxious to have removed.

We had no instruments save a dissecting case. Drs. Smith & Bruce were a short way off, and were invited to attend and assist us; neither had his pocket case. They coincided in our opinion, that there would be but little or no risk in dividing the muscles under which the iron had been plunged. Chloroform was administered, and with a small bistoury, I proceeded to make an incision from the second opening to the sternum, using little traction; a piece of the barrel  $4\frac{1}{8}$  inches long, and weighing  $2\frac{1}{2}$  oz., was removed from the denuded rib. The concavity which was part of the original bore of the barrel, precisely fitted over the rib, and the piece was so curved by the lateral pressure of the powder during its expansion from combustion, as to be brought in close adaptation with the convexity of the rib; the lateral edges dipping into the intercostal spaces above and below, formed by the contiguous ribs with the third. Slight hemorrhage occurred from the division of some of the ramifications of the external mammary artery; ligatures were applied, and hemorrhage ceased. No perceptible anatomical changes had taken place in the parts, except about the openings, which were soft, pulpy, purple, and nearly insensible. The edges of the wound being brought together, sufficient opening was left for the evacuation of the unhealthy

accumulations from the diseased structures. Of course, union by the first intention, only took place in the part unaltered by disease—the other healing by granulation. The patient, at the time of the operation, was very much emaciated—of a sallow complexion. He had made a crop with his own hands the preceding season. He visited my office a few days ago. He is now looking well, and has gained fifty pounds in weight since the operation.

## SELECTIONS.

*A Monograph on Ovarian Tumors; with an extended view of Ovariotomy as a means of cure.* By T. M. TWEED, M. D., of North Liberty, Ohio. (Continued from page 489.)

**THE TREATMENT OF OVARIAN DROPSY.**—In no disease has the application of medicine hitherto been of so little avail as in the one under consideration. It has been acknowledged by many, and, indeed, by nearly all, who have attempted its cure, “that medicine has no power over it.” Dr. Hunter says, that “the ovarian dropsy is an incurable disease; and that the patient will have the best chance of living longest under it, who does the least to get rid of it.”

Dr. Elliotson says, “that if any medicine does good in these cases, it is iodine.” Again, “if iodine did not exist, I would not use any medicine at all in these cases, for excepting it I never found any, of whatever kind, to do the least good.”

Dr. Blundell, speaking of purgatives, diuretics, mercurials, etc., in this disease, says, “they do no good. I will not venture to say you are not justified in making gentle attempts with these remedies; but experience shows that from these medicines so little good is to be obtained that in attempts like these the constitution ought not to be injured.” And lastly, Burns states that “medicine has as much power over these cystic tumors as it has over the configuration of the patient’s nose.”

If these opinions alone are regarded, the attempt to cure ovarian dropsy would appear absurd and ridiculous. But although this want of power in medicine is seen in many cases, in some it does produce benefit; and although it may not establish a cure, it may so retard the progress of the disease as to enable the patient to live in comparative comfort for some years.

Our observations upon the treatment of this disease will be comprised under two distinct heads:

1st. The Palliative Treatment; 2d, the Radical Cure.

**THE PALLIATIVE TREATMENT** of ovarian dropsy consists in the employment of Medical and Surgical remedies. It is said to have been *cured* under various plans of treatment, the success varying according to the age, health, character of the patient, and the longer or shorter duration of the disease.

If enlargement of the ovary arises from inflammatory action, the enlarged organ can be felt distinctly between the vagina and rectum, and is very painful on pressure. In this case a strict antiphlogistic treatment is to be pursued. Local blood-letting is very important; this is to be effected not as usually prescribed, viz: by cupping the loins, or by the application of leeches to the vulva, but what is more effectual, by the application of leeches to the tumor itself through the rectum. The bowel is to be washed out by a copious enema; then by placing the

leeches in a long glass tube, the upper end of which is perforated by a number of holes, the mucous membrane bulges through these perforations on introducing it into the bowel, and the leeches usually fix themselves to it. Care is necessary in introducing this instrument, and when it arrives at the diseased ovary it produces pain, and ought not to be pushed further. Large quantities of blood may be taken in this way, and the application ought to be repeated every fourth day until the inflammatory symptoms subside.

This local depletion is to be further assisted by calomel and opium and saline purgatives. Blisters and leeches ought to be applied to the tumor when above the pubis, when pain or uneasiness is present. Dr. Ashwell regards this antiphlogistic plan as very efficacious in the early stages of the disease. He says, "I have sometimes found local bleedings by leeches followed by repeated blisters (kept on only for a few hours,) and succeeded by linseed poultices for several days, have not only retarded further growth, but have diminished the absolute bulk of some incipient ovarian tumors."

When the tumor in the posterior wall of the vagina gives any sense of fluctuation, it ought to be punctured. This should be done with a curved trocar, where the fluctuation is most distinct.

The tumor in this position often draws down the fundus of the uterus, so as to produce retroversion of that organ; in such cases there is difficulty in evacuating the urine, and sometimes there is retention; if so the catheter must be used. Constipation is almost always present, producing pain, to overcome which, aperients are necessary.

In spite of all our endeavors the tumors may increase and occupy the cavity of the abdomen; and it is in this position we are more frequently called upon to treat it.

In this stage, also, the antiphlogistic plan of treatment has been advised, and was the one followed by Mr. Abernethy, "in order to reduce any inflammatory symptoms, and produce, if possible, absorption of the contents of the sac." Leeches applied to the tumor, followed by small and repeated blisters, have been recommended. This plan is very efficacious in removing any pain that may be present; and the constant irritation may be beneficial in removing the contents of the tumor; indeed, Dr. Bernott, of Cork, relates an instance where an ovarian dropsy was entirely cured by the constant application of counter-irritation in the form of a large seton applied over the tumor. Small blisters, also, have been used, and said to have been very beneficial to these swellings.

The most powerful remedies in this disease and those which seem to have the most influence over it, appear to be iodine and the liquor potasse. We have already stated that in the opinion of Dr. Elliotson, iodine is the only remedy we would use; as all others under his observation had entirely failed. He says, "I have seen cases diminish and some apparently cured by this remedy." Dr. Seymour also speaks very highly of it and gives cases illustrative of its remedial powers; he thinks it acts by producing suppuration of the cyst with adhesion of it to some of the neighboring organs and the discharge of its contents. The constitutional symptoms before these desirable events take place, are frequently very severe and often destroy the patient. Dr. Seymour remarks in one case under the action of this remedy "the tumor appeared to gradually grow softer; at length very violent constitutional symptoms arose, tremblings, great



distress of mind, and lowness of spirit; to which succeeded the symptoms of internal suppuration, a very quick pulse, tongue brown and dry, rigors, followed by profuse sweats. At the expiration of a fortnight, the patient began to pass purulent matter by the rectum and vagina of various consistence and intolerable odor; this passed daily for some weeks and the patient recovered." In most of the recorded cases where some of the preparations of iodine have been used with success, as in Dr. Elliotson's, A. T. Thompson's and others, the tumor itself has been found to become softer on its surface, adhesions have taken place to some of the neighboring viscera, ulcerations have occurred between their walls, and the contents of the cysts have been injected into their cavities to be discharged at their natural outlets.

The desired objects in the use of this remedy appear to be suppuration of the cyst, and the discharge of its contents; but we are not always able to secure them; the inflammation may rise too high and induce a fatal result, or no effects at all will be perceived by its application; but in the majority of cases iodine acts more by inducing suppuration of the cyst than by any absorbent powers it may possess.

Mr. Jeafferson (*Med. Gaz.*, Sept., 1844,) says, "I have also had several opportunities of witnessing the *gradual softening* of ovarian tumors under the use of iodine, when I have not been able to learn the ultimate termination of the case. This softening process on the tumor appears to be the effect of these remedies; they do not, however, possess much, if any influence in promoting its direct absorption. What is the precise *modus operandi* it is not easy to decide."

From these remarks we may perceive that iodine, as a remedy in this disease, requires great care in its administration; that if any unpleasant effects are produced it should be discontinued for a time, and a return to its use should be careful and guarded.

The iodide of potassium is the remedy chiefly employed in ovarian dropsy, and possesses the advantage of combining the iodine and potash. When the system is fully under its influence, there are disagreeable sensations about the nose, coryza is present and an eruptive acne is observed about the shoulders. The syrup of the iodide of iron is an effectual and pleasant remedy for delicate females. When dyspepsia is present the iodide of potassium is given in doses of five, increased to twenty grains in some bitter infusion, two or three times a day; or it may be given with a purgative when constipation is troublesome.

Some patients are unable to take iodine in any of its forms on account of its action being very quickly displayed in their system; a good substitute in such cases is the liquor potasse. This medicine given in as large doses as the stomach can bear (small beer or table ale is the best vehicle on account of its efficiently disguising the taste,) has been very successful under the direction of Sir. B. Brodie in removing scrofulous and steatomatous tumors; it is found also to act in a similar way to iodine in ovarian dropsy. Dr. Seymour states that this remedy has been used in ovarian disease; that the general health has appeared to be often greatly improved under its use, and the formidable disease itself is reported to have disappeared under its employment. "The liquor potasse in such cases, appears to act by inducing suppuration in the cysts which is afterward discharged, adhesions having been formed with the neighboring viscera. In this respect its action resembles that of iodine, and is contra-

indicated when increased vascular action is present; and in fact it is in the leucophlegmatic habit of body that it appears to be most applicable, whether as a curative or only as a palliative remedy."

Dr. Warren relates a case in his work on tumors, where this remedy produced softening of the tumor and a discharge of purulent matter by rectum, with a perfect cure of the patient.

The late Dr. Hamilton of Edinburgh, proposed a plan of treatment in ovarian dropsy, which, under his management, is said to have been very successful. It consisted of moderate bandaging, percussion on the tumor, and small doses of the muriate of lime. The percussion could either be made by means of the fingers, or by an instrument consisting of five balls attached by rods at right angles to the handle so as to somewhat resemble the hand and five fingers. I will give his own description of his mode of treatment; he says, "adverting to the effects of percussion and pressure in chronic rheumatism, and knowing the influence of the continued use of the muriate of lime in indolent glandular swellings, I was led to the trial of these several means as being at any rate perfectly safe. I advised, therefore, that moderate and equable pressure of the abdomen should be made by means of a suitable bandage; that the large part should be subjected twice a day to gentle percussion; and that a course of small doses of muriate of lime should be continued for at least for several months. When pain or tenderness was experienced on the ovary being pressed upon, I recommend the daily use of the warm bath. This plan of treatment has been much more successful than I had anticipated; in seven cases in which it has been used, the enlargement has so completely subsided that it is no longer tangible. There could be no mistake in the majority of these cases, not only because the size of the diseased ovary was very considerable, the fluctuation was distinct and all the ordinary characteristics were well marked, but also because the nature of the affection had been previously ascertained by some of the most experienced practitioners in London. Previously to the diminution of bulk in all the successful cases, it is proper to add that the circumscribed enlargement of the ovary has invariably become soft. This change was so remarkably obvious in the first of the successful cases, that the indentation of the patient's fingers upon it was similar to what occurs in anasarca, although it had been previously incompressible, as the tumor extended as high as the right hypochondrium. This important change was first perceived by the patient herself."

This plan has not been so successful in the hands of English practitioners as in those of Dr. Hamilton. The question arises, whether the plan has been really tried, or only partially put in practice. It is to be feared that the latter has been the case; for when we consider the difficulties which arise in treating a chronic case, where the improvement is very slow, and scarcely perceptible, we cannot wonder that the patients exertions should become relaxed, and the chance of cure abandoned.

Mr. Isaac B. Brown has lately published a plan of treatment, having the same indications as Dr. Hamilton's, although the means by which he intends to secure success are different. His plan consists in evacuating the cyst by tapping, after it has ceased to increase under the use of mercurial remedies and diuretics; and then by applying large pads over the cyst, and bandaging the abdomen very tightly, he endeavors to obtain obliteration of the sac, and consequent cure. He has published

several successful cases arising from this treatment. (*Vide, London Lancet*, vol. 1, New Series, page 179.)

He says: "I divide my treatment into constitutional and local, and treatment after tapping.

"1. The constitutional one consists in the administration of mercurials internally as alteratives, and externally by friction over the abdomen, and continued until the gums are slightly, but decidedly affected; and this must be continued for some three weeks. I lay particular stress upon this point; at the same time, diuretics must be given, and after the first week, tonics must be combined with them. The food should consist of light animal diet, and the patient should take daily exercise in the air.

"2. Local treatment. This consists of the careful application of a tight flannel bandage, so as to produce considerable pressure over the tumor. When it is found that the abdominal action has been checked by a positive decrease in the tumor, and a continuation of such decrease, or by a positive non-increase for some weeks, then the cyst should be tapped, and all its fluid evacuated.

"3. Treatment after tapping consists of accurate padding and tight bandaging over the cyst and body, generally for two or three weeks; and the medicines and position ought to be continued for at least six weeks. I would particularly wish to enforce the importance of the after-treatment, as on that depends very much the success or failure of the case."

This plan of treatment has been given to the profession, and apparently sanctioned by a number of successful cases; but we are bound to add, that some of those cases, called and published as successful, have come into other hands; and a highly respectable physician states, that two of Mr. Brown's cases have come under his observation—one died of ovarian dropsy, and on a *post mortem* examination, the cyst was found still to exist as large as before; "the other," he adds, "is still ill; the cyst has refilled, and we were obliged to have recourse to tapping."

This fact reduces considerably the value of Dr. Brown's cases. Again, on referring to the cases themselves, can we, on their recital, confidently assert that they are all cases of ovarian cysts? The real diagnostic marks are not *too clearly* stated, and the fluid evacuated by some, resembles that secreted by the peritoneum.

In a discussion at the Physical Society of Guy's Hospital, where the point was urged, Mr. Brown failed to convince the members that a cystic tumor was present in several of the cases he related to them. And, lastly, we would ask, can the system of salivation, which is an essential part of the treatment, be borne by many, or ought it to be administered in others who are young and healthy? The experience of the heads of our profession are against its administration; and some think "that we are not justified in persevering in a remedy which sometimes produces direful effects upon the constitution, and has so little effect upon the cyst itself."—BLUNDELL.

Pressure properly applied, is undoubtedly the best part of this plan; but this is not original, as Mr. Hamilton and others had advocated its efficacy long before Mr. Brown's treatment was thought of. Besides, pressure can only be applied in a limited degree; for if it be too forcibly made, the circulation becomes interfered with, and it is difficult to be borne. Even if great pressure can be maintained steadily, we are fully aware that it usually fails to obliterate cysts on the *external* parts of the body.

In a cystic tumor of the scalp, the most favorable place for pressure, it rarely obliterates the sac. Of course, we can hardly suppose that the effects of pressure can be of much service, where there is no point of resistance, and where serious consequences may be produced in other organs. Pressure, again, can only be tried with a hope of success, in those cases where the cyst is simple, for it must inevitably fail in the multilocular variety. In the latter case, all that we could hope to accomplish, would be to retard its rapid development.

The application of pressure to the abdomen, produces a resistance to the rapid development of these bodies, and acts in the same way that extensive adhesions would do, in arresting its enlargement, by placing resistance to its increase.

Dr. F. H. Ramsbotham relates a case of this kind, which occurred in the practice of his father.

With all our vigilance and perseverance, the tumor may gradually increase to such a size as to become troublesome by its bulk, and endanger life by its interference with the vital functions. We shall, in this stage of the disease, have to treat the various symptoms arising from pressure. The tumor may encroach upon the stomach, and cause constant vomiting, which may baffle the most skillful and varied treatment. That this is the result of mechanical pressure, is proved by many cases. It is true the functions of the stomach may become permanently diseased, and even organic changes occur, but this is not usually the case. In one instance seen by Dr. Lec, the vomiting ceased immediately after tapping; so that without this reduction in size, the ordinary treatment by effervescing salines, hydrocyanic acid, creosote, sinapisms, and blisters, would be of no avail. Dispnœa is also a very frequent complication of this stage of the disease. It may be partially relieved by position, but its permanent remedy is the reduction of the sac.

The kidneys are, also, very frequently interlered with: the pressure of the enlarged ovarian prevents the proper secretion from taking place. Here some strongly recommended diuretics, but they can do no good, the cause being mechanical not functional. Remove the pressure, and the kidney gives out its secretion, natural in quantity and consistence. This fact was well illustrated in a case already noticed, where the secretion of urine was greatly diminished during the distension of an enormous cyst, but was instantly restored to its natural quantity and quality, after the pressure had been removed by tapping. Suppression again took place, on the enlargement of the tumor, and resisted every diuretic.

Diuretics are valuable, when ascites exist as a complication, but should never be used where the pressure is the cause of suppression; they are also useful where there is œdema of the ankles and eyelids.

Having now presented the principal remedies and plans of treatment, recommended by the best practitioners, and perceiving how little the disease is amenable to medicine, we pass to the consideration of paracentesis as a means of palliation and cure, adopted by many respectable authorities.

PARACENTESIS.—Practitioners generally have a great dislike to a recourse to this mode of palliating the disease. Experience teaches them that, in a majority of cases, the relief obtained is but temporary, the cyst rapidly refilling, leaving the patient in a worse condition than before. There are cases on record, however, in which this remedy has been fol-

lowed with perfect success. Dr. A. T. Thompson reports a case in which tapping was performed fourteen times, and the patient recovered.

The operation, in itself, is considered one of the most simple in surgery. The patient generally sits in a chair, or on the side of a bed, with a broad piece of flannel covering the abdomen, the ends being slipped up, in order to adapt the pressure equally to the upper and lower portions of the abdomen. These ends are placed one within the other, and drawn tightly by assistants; a small opening is made in the flannel anteriorly, through which the trocar passes. This instrument may be introduced at once, or the skin may be first divided (which is the most usual way,) by a bistoury or lancet; or, lastly, the latter may be carried directly into the sac, and a blunt-pointed trocar and canula may be introduced into the opening. Gradual pressure is to be made with the bandage, in order that the contents of the cyst may be evacuated, and, also, to secure the patient from fainting, and protect the viscera, which would otherwise be left unsupported, by the withdrawal of the fluid. Immediately after the operation, the patient often feels faint, and sometimes syncope takes place, especially if the patient be not kept up upon the abdomen. This has sometimes, but rarely, been fatal; usually the patient recovers quickly, and feels great relief; instead of dyspnea, a feeling of distension and fear of suffocation, there is distinct calm; the lungs perform their office, and the distress ceases.

After tapping, the disappearance of the tumor is sometimes entire, at others only partial. This depends upon the character of the cyst. If it be simple it almost entirely disappears; but if multilocular the patient is surprised to find large hardened masses still remaining in the abdomen. In a few days she feels herself to become more distended, and from this time the abdomen gradually enlarges until it attains the same or a larger size than before the operation.

There are several points worthy of notice in the operation of paracentesis.

1st. The operator should correctly ascertain the most prominent part of the tumor, and the situation of the space where fluctuation is most distinct. That portion mid way between the umbilicus and pubis in the linea alba is the most appropriate; but in the multilocular variety, on examination and percussion, distinct hard masses may be found there, which ought particularly to be avoided; for if the trocar is introduced into them, the fluid contents of the sac will not be drawn off, and the patient will be subjected to the danger of an inflammatory attack.

2d. The patient ought always to be informed that the actual decrease of the tumor may be very slight, especially if we suspect a cyst of the multilocular variety. In this case, a small cyst giving distinct evidences of fluctuation, may be opened, and only a few ounces of fluid be evacuated, giving only partial relief, and the operator may be compelled to make another puncture.

3d. The trocar should be introduced with a certain degree of justifiable force. A timid surgeon often fails in getting into the cyst, from fear of using too much force. The walls of these tumors are frequently very firm and dense, and if a certain degree of power is not used the sac will be pushed before the trocar and its cavity will not be opened.

4th. All large veins should be avoided.

5th. It is necessary to be particular in the diagnosis, and always to as-

certain whether the bladder has been fully evacuated. If any doubt exists the catheter should be introduced before the operation; indeed, this ought to be done in every instance, as we cannot always depend upon the patient's opinions or expressions; for cases have occurred in which the distended bladder and the pregnant womb have each been punctured for cystic dropsy.

**DANGERS OF PARACENTESIS.**—This operation may be performed very many times on the same individual without any bad effects, although it may give only occasional or partial relief to the patient. Several cases are recorded of enormous amounts of fluid being taken away by a great number of operations, through a series of years, some during thirty years, with no marked effects upon the constitution. All readers of surgery are acquainted with the case of "Dame Mary Page," who in sixty-seven months, was tapped sixty-six times, and discharged 240 gallons of water without ever repining at her case or ever fearing the operation.

But there have been larger quantities of fluid withdrawn, and the patient has survived even a greater number ofappings than good Dame Mary Page. In the celebrated case related by M. Martieau of Norwich, there were 6831 pints or 13 hogsheads of fluid withdrawn from an ovarian cyst during eighty different operations. (*Vide. Philos. Trans., Vol. 74, page 471.*)

Dr. Buckner tapped a patient upwards of twenty times during a period of two years. She at last died of inflammation of the cyst which was found to be multilocular and of large size.

In most of the medical journals of the day, may be found some of these extraordinary cases; and it is no slight encouragement for the afflicted, to be made acquainted with the facts. But we must not blind our eyes with the *exceptions* and forget the *rule*, for these cases are singular and therefore recorded, while the majority die in much less time and are buried in forgetfulness.

Dr. Blundell's practical observations on this point are well worthy the profoundest attention. He remarks "although women do live now and then to undergo these frequentappings, yet they more generally sink; and hence, in ordinary practice, the longer the first tapping can be delayed the better, for there is nothing more unwise than to ground your general practice upon the *exception* to the *RULE*, though the error is not unfrequently committed."

It is, then, possible for the operation of tapping to be performed, and no danger arise; the patient may not recover from its effects until it is again required; but this is not always, nor indeed generally, the case. Rapid and fatal syncope may follow the operation, or the patient may die from exhaustion, after having rallied for a few days.

The natural tendency of an ovarian tumor, when uninterfered with, is to grow *slowly*; but when the fluid is withdrawn, the pressure which before existed, is taken from the secreting vessels; consequently, re-accumulation of fluid quickly follows, which frequently results in inflammation of the cyst, with rapidly fatal symptoms.

Danger arises from this operation, by the accidental puncture of one of the large vessels, which frequently ramify on the surface of the cyst. Dr. Buckner observes, "I have now seen several *post-mortem* examinations, where these tumors existed, and have observed large vessels, nearly the size of the little finger, ramifying on the sac, and one was placed in

such a position that it would have been wounded, had an operation been performed." These large vessels, also, may arise in the omentum, which may be intimately attached to the anterior part of the cyst. This peculiarity occurred in a case in which the operation of ovariotomy was performed, witnessed by Dr. Lee, who says, "the vessels were as large as those of the dura mater.

The greatest danger to be apprehended after tapping, is the inflammation of the cyst itself, or the peritoneum. This is almost the inevitable termination, at some period or other, of the lives of patients who are subject to the operation. According to my own experience, the cyst itself is the part most usually inflamed. In some cases, a portion of the fluid escapes and acts as a foreign body on the peritoneum; or the trocar may have punctured a mass of cysts, and thus produced inflammation.

The effects of the inflammation, however produced, are alarming; all the symptoms of active fever are found, there is great pain in the abdomen, which becomes tense, and very tympanitic; vomiting ensues, and rapid exhaustion takes place, followed by death.

We have taken pains to collect a number of cases, in which the duration of the disease, after the first tapping, was accurately recorded, and we find that more than one-half of those who died did so within four months, and a moiety of these were only tapped once. Almost all the deaths, after the first operation were attributed to inflammation of the sac, or the peritoneum.

The operation in some instances, cures the cystic tumor. This happens when it is unilocular and simple; but these cases are rare, and, from the facts about to be adduced, we may well dread to perform the operation.

In very many cases, paracentesis can do no good, the tumor being made up of several small cysts; in many others it only affords partial relief; and in some, it actually kills. Dr. Blundell has well said, "Make the best of it, and tapping, after all, is an unsatisfactory sort of remedy; dangerous in scirrhus-dropsy; of partial relief in dropsy of many cysts; of no effect where the cystic material is viscid; obnoxious to inflammations, adhesions, suppurations, exhaustions, repetitions, and death, even in cases the most favorable; and the more I have seen of this operation, the more I have felt inclined to whisper to myself, when the surgeon has taken up the instrument, I wish I could do something better."

WHEN IS PARACENTESIS TO BE PERFORMED?—If the operation is decided upon, it is a matter of no small moment to determine *when* it shall be performed. Three periods have been suggested, each of which has its advocates, and its supposed peculiar advantages.

- (1.) When the tumor arises just above the pubis.
- (2.) When it occupies the abdomen, but without great distension; and,
- (3.) When it presses upon important viscera, and impedes the vital functions.

The operation in the first position is recommended by Dr. Blundell, upon the principle that the surface from which fluid is secreted is small at that period, and that there is a greater chance of a curative process being established.

The operation can be performed easily enough when the tumor is situated between the vagina and rectum, and when the fluctuation is distinct.

Dr. Odge, of Rochdale (*London Medical Gazette*, Vol. XXIV,) gives a case of successful cure by this method. In a similar case, it succeeded for a time ; but the patient took out the canula which was left, and the secretion again returned. In another case operated on in this way, it terminated unsuccessfully, from the cyst being multilocular, and the base of the tumor forming almost a solid substance, although there was distinct fluctuation. Many successful cases might be quoted, and especially such as have been discovered and operated upon, during parturition.

But Dr. Blundell thinks that the tumor might be opened when it is as large as a child's head, and situated above the brim of the pelvis, "Now, supposing our knowledge be sufficient, and our caution great, would it perhaps be impracticable to effect all this, even when the tumor lay above the brim of the pelvis, in the hollow of the ilium. For this purpose, might not an opening be made in the abdominal covering, large enough to admit the forefinger like a canula ; and might not the point of the finger be placed on the surface of the ovary, so as to ascertain that no intestine was interposed, and, then, when sure the intestines and bladder are not interposed, might we not pass a very small trocar through the opening, and into the ovary, so as to evacuate the contents, at the very commencement of the disease ?"—*Blundell*.

There can be no doubt that the early evacuation of the fluid, is a desirable proceeding ; and when the tumor can be felt in the vagina, having distinct fluctuation, it ought decidedly to be punctured. The success of this operation has been great, when the disease has complicated labor. From our knowledge of abdominal surgery at the present time, we are aware that a small incision into the peritoneal cavity is not so dangerous as at one time we were led to suppose. But we should be quite certain of the existence of the cystic nature of the tumor, before such an attempt is proceeded with.

Dr. Bright does not approve of this early paracentesis. "It has," says he, "been recommended to have recourse to paracentesis, when the tumor is as large as the uterus at the termination of pregnancy, before the vital functions are impeded, or the distension of the cyst becomes larger.

"I conceive," says he, "that the time of the operation has arrived, when the tumor pretty fully occupies a large portion of the abdomen, giving the appearance of pregnancy advanced to the last months, and before any material mischief seems to threaten either the surrounding viscera, or the parietes of the tumor itself ; for there can be little doubt that the forcible distension of the sac, continued beyond a certain limit, will endanger its inner surface, and, perhaps, prove one cause of the ulcerative changes which often take place, and are the source of great constitutional irritation, and death."

And, lastly, many practitioners agree, that the rapid re-filling of the cyst, after the first tapping, is so dangerous, and produces such fatal effects, that they willingly defer the operation until they are compelled to relieve their patient from the severe systems they suffer—the operation being performed from necessity, not from choice.

We do not think any distinct rule can be laid down, which, would embrace the period of tapping, in all cases of ovarian dropsy. It appears that each individual case has its peculiarities ; that the period of the disease, at which we are called to prescribe, is so various, and the nature of the cysts is so different, that each case ought to be treated individually,



according to the tact of the surgeon. When the patient is young and healthy, the plan of puncturing the cyst early, and applying pressure and friction, is, perhaps, the best mode of treatment ; and the employment of iodine internally, so as not to injure the general health, is beneficial. But, when a large, multilocular cyst come under treatment, that will be the best where least is done to the local disease, and the general health supported. In such a case, tapping is injurious, and ought, if possible, to be avoided.

Several other surgical operations upon the cyst itself, have been suggested, with a view to destroy the secretory power of its lining membrane. It has been proposed to make extensive incisions into the cyst, or take portions away ; and cases are recorded by Le Drau and others, of cure by this treatment. Setons have been passed through the walls of these cysts, and tents have been left in openings made into them, for the purpose of producing suppuration and adhesion of their internal parietes. Mr. Key tried these remedies in several instances, but found them to fail in all. Cysts have, also, been injected with irritating fluids, for the same purpose. An aqueous solution of iodine and iodide of potassa, has been highly recommended ; and if injecting the cyst is at all justifiable, it is, perhaps, the very best that can be used. Some cases have partially justified the treatment, while in others it has completely failed.

All these plans are now rejected from modern practice, and we think very justly, because the constitutional irritation, following their application, is so great as to be, in most instances, fatal. At best, when these remedies have done their utmost, the disease is not cured ; fitulous openings remain, and at last the patient dies exhausted.—*Cincinnati Med. Observer.*

*The Causes and Prevention of Yellow Fever in New Orleans, and other Cities, in America.* By E. H. BARTON, A. M., M. D., Chairman of the Sanitary Committee ; late President of the Louisiana State Medical Society ; former Professor of the Theory and Practice of Medicine and Clinical Practice in the Medical College of Louisiana, &c., &c. Third edition, with the addition of upwards of seventy pages of "Prefatory Remarks," and a Supplement. New York : T. C. Bailliere, 1857. 8vo. ; pp. 282.

Ignorance exacts many heavy sacrifices both of person and of property, from her followers. Showing herself under a great variety of masks and ways ; sometimes lackadaisical, sometimes smiling, and not seldom forward and self-sufficient, she does not frighten the multitude, like sin and death might be supposed to do, but she is in close alliance with both of them ; a sleeping partner, as it were, supplying quietly, and often with a show of kind intentions, the chief materials for the others to work on and compass their ends. Neglect and exaggeration ; ridicule of danger at a distance, and the basest fear when it is imminent ; niggardly in preparation against coming evils ; prodigal to wastefulness when they are

actually felt; sneering at wisdom in the garb of science, and favoring every impudent pretender, whose garb is motley, with cap and bells. Ignorance stands opposed to improvement in any shape. What to her is famine from neglect of agriculture, and pestilence from neglect of the precepts of hygiene! Has she not the precedent of former times and older prejudices on her side! Better, she will exclaim to the deluded multitude that you should die in all the variety of suffering and woe, as your ancestors have died before you, good, patient, uncomplaining souls as they were, than that you should be led away by these new-fangled teachers, these visionary enthusiasts, who promise you comfort, and health and peaceful enjoyments, which you know not of. Why go to the trouble and expense of procuring these probable benefits, even if they should prolong your lives and save your children from uncounted ills? Your lives are long enough, and why should you tax yourselves for the sake of your children? They are no better than you, and have no superior claims to escape from the filth, and the mental darkness, and the free fights, and the privilege of killing or the chance of being killed, in which you have luxuriated so long! Why rehearse this nonsense, some of our readers may ask; and yet it is by such nonsense that a community is sometimes carried away, and excuses itself for a neglect of the prevention of disease, and of demoralization and crime. Who often is so unpopular, so little thanked as he is, who sets about refuting this nonsense, and aims at the removal, or even amelioration of existing evils, and the improvement of the social condition of his fellow-citizens!

We do not say that Dr. Barton, the author of the work before us, is in this category of the neglected or illy requited; but we entertain misgivings of his not having received the full measure of reward to which he is so richly entitled, for his long, devoted, and judicious services, in bringing about an amended condition of the public hygiene of New Orleans, and with it protection from the dreadful pestilence, which, at different times, has destroyed so many of her people, and retarded so much her growth and prosperity. It may be, that, in the ardor of his belief of the necessity of reform, he does not always adhere to the most rigid methods of argument, nor express himself in a style simply didactic. He sometimes clothes aphorism in a metaphor and throws spangles on science, beyond the expectations of plainer votaries. These little peculiarities, we may even magnify them into defects, do not, however, materially interfere with his array of facts, or the zeal and ability with which he brings them to bear in support of his positions. But, before we take up his line of argument and illustrations, it is proper to state the circumstances to which the present volume owes its appearance. After public attention had been thoroughly aroused to the importance of the subject by the yellow fever scourge of 1853, the Board of Health of New Orleans appointed a Sanitary Commission, consisting of the Mayor of the city, A. D. Crossman, and Drs. E. H. Barton, A. F. Axson, S. D. McNeil, J. C. Simonds, and J. L. Riddell, whose duties were designated to be:

“1st. To inquire into the origin and mode of transmission or propagation of the late epidemic yellow fever.

“2d. To inquire into the subject of sewerage and common drains, their adaptability to the situation of our city, [New Orleans,] and their influence on health.

"3d. To inquire into the subject of quarantine, its uses and applications, and its influence in protecting the city from epidemic and contagious maladies ; and

"4th. To make a thorough examination into the sanitary condition of the city, into all causes influencing it, in present and previous years, and to suggest the requisite sanitary measures to remove or prevent them, and into the causes of yellow fever in ports and other localities having intercourse with New Orleans.

The results of the inquiries and investigations on these several points were embodied in a volume, which was printed in 1854, under the title of "Report of the Sanitary Commission of New Orleans, on the Epidemic Yellow Fever of 1853 : Published by authority of the City Council of New Orleans." Dr. Axson reported on the first subject of inquiry ; Dr. Riddell on the second ; Dr. Simonds on the third ; and Dr. Barton on the fourth, or on the sanitary condition of New Orleans. The present volume is a third edition of this last report, with the additions specified in the title page. Great stress is laid by the author, on the paramount importance of a thorough study of etiology ; for a knowledge of causes can alone suggest the means of prevention. In its large and comprehensive sense, so as to include a connected and philosophic view of the general causes of disease, etiology, to use the language of Dr. Barton, who calls it "the basis of preventive medicine," is hardly taught in this country at all. Now, this is infinitely more important than curative medicine ; preventible disease being proportioned to non-preventible disease as 8 or ten to 1. This view may be farther enforced by a simple statement of the fact, that in 1853, thirty thousand persons, of the population of New Orleans, were attacked by yellow fever, of whom it has been estimated that upwards of eight thousand were carried off by the disease. It is easy, to a certain extent, to fill up some of the details, which must suggest themselves to every one, of the concomitant and attendant circumstances ; such are, the pain and suffering, of which the bodily is not always the greatest, of the sick—the wail of the survivors for the dead—the desolated homes—the widows, the orphans, the childless—ruined fortunes—general gloom and distress—interrupted commerce, and the loss of millions in consequence. Surely, a knowledge of the means of preventing this terrible array of ills the most afflicting to humanity, is worth obtaining ; and he who offers it to us in good faith, and after much patient search and striving to discover it, deserves our thanks, although, in the end, the reality may fall somewhat short of the expectation raised.

In the "Prefatory Remarks," the author embraces the opportunity to fortify the positions taken in the Report itself, to extend its illustrations—and to give farther explanations of portions of it which have not been "so fully understood as they might have been." An opinion was expressed in the Report, that the disturbance of the original soil of a country, when the meteorological condition required to give it activity is present, has been one of the most efficient causes of every epidemic which has devastated the Southwestern parts of the United States, at least during more than half a century. To the evidence furnished by New Orleans itself, the author has added that procured from a number of towns and places in the southern region of country—some of which are introduced in this part of the work. New Orleans is represented in the Report

(p. 8), "to be one of the dirtiest, and with other conjoint causes, is consequently the sickliest city in the Union, and scarcely anything has been done to remedy it." The junction of terrene and meteorological conditions, "being absolutely indispensable to the origination, transmission, and duration of yellow fever everywhere," and one of these conditions, the terrene, being under human control, and even the other, or the meteorological, susceptible of modification by the same agency, it follows that the disease in question is preventible. The gist of the Report, after a specification of the cause which, separately or combined, or in alternate action, give rise to yellow fever, consists in pointing out the means by which they are to be removed, or their virulence nullified. The medical constitution of each month of the year 1853, up to the date of the appearance of the fever, and next the epidemic constitution, are described. The influence of the latter on vegetable and animal life is also mentioned. A critical analysis of meteorological tables, containing records of temperature, rain, and humidity, justifies, in the opinion of Dr. Barton, the conclusion, that "*in every instance where the facts are known, great heat and high saturation were the predominant conditions for the prevalence of the disease, and it was often remarked, that the return of these conditions reproduced the fever two or three times.*"

High temperature of a certain duration, is essential to the production of yellow fever. The average temperature at midday, in the month of May and June preceding the epidemic at New Orleans, has rarely been 81.88° F., and at the same hour during the three epidemic months 83.-75° F. The average temperature of the whole day for the three months was 79 51°. It rarely reaches 90° F., during the hottest part of the day. It is not meant to be asserted that the prevalence of the fever is in proportion to the temperature. Other circumstances are necessary, among which Dr. Barton places foremost high saturation or great humidity. The conjunction of high heat and humidity is declared to be a *sine qua non*. It has been noticed in Brazil and in Demarara, that, whenever the diseases varied or changed, they were usually preceded by some variation in the climatic condition of the place. It was remarked by Dr. Blair, that extreme seasons represented by the above conditions of atmosphere, "not only modify the type of disease, but the effects of treatment; during the depths of the rainy season adynamic and congestive types are prevalent and marked; purgatives now do harm, mercury too easily salivates; thirst is diminished. There is increased action of the kidneys; there are local congestions; headaches, drowsiness, sopor, coma, watery stools." These effects have been noticed by the author, in the climate of New Orleans for many years; (p. 76.) Dr. Barton tells us, "that there is a dew-point peculiar to each of the higher classes of fever (in their aggravated or epidemic grade) is, doubtless, true from what we know of the temperature essential to their existence, and how greatly they are all increased by humidity. The dew-point of yellow fever is from 70° to 80°; the disease rarely exists long when it is under 60°. The plague has probably a dew-point of 40° less. The typhus gravior at from 35° to 45°, and the Cholera in this climate varies from 48°, and sometimes much less, to 74°, and is probably less controlled by its fall than yellow fever. The sources of this great excess of humidity are, mainly, the swamps, lagoons, lakes around us, and which are also the principal causes of our fogs, imperfect drainage and want of pave-

ments." Beyond what the author says of the dew-point in the season of the yellow fever, we need not attach importance; the data on other points are too uncertain or conjectural. *Solar Radiation* which implies the difference between the temperature in the sun's rays and in the shade, a difference more felt even than measured by the thermometer, has not, Dr. Barton conceives, heretofore attracted notice. In common phrase, the clear days of the seasons of the disease are called "yellow fever weather." "It is characterised by being very hot in the sun and cool in the shade, at the same time, on one side of the street a boiling temperature, and on the other so cool as to urge to button up the coat. This uncomfortable alternation of chilliness and heat is productive not only of uncomfortable feelings, but when exaggerated, passes into disease—constitutes the first stage of yellow fever." We are told a little farther on, that the difference of temperature here described, "essentially constitutes *with other circumstances*, a sickly season;" p. 86. This physical phenomenon is described in several places, and its direct and collateral relations are descanted on by the author. In reference to the prevalent winds, we are told that during the summer they are from the east, south, southwest and southeast. "During the worst period of the epidemic, the most frequent wind was from the east. Still more remarkable was the frequency and long duration of calms," with all their injurious saturations and depression of the vital principle; p. 93. Fluctuation in the agencies both meteorological and terrene, which give rise to yellow fever, are held to be probable. The suspicion, that fever arises from a deficiency of ozone, is adverted to by the author, but no experiments were made in New Orleans to test the question.

The terrene causes are next taken up, and their relatively injurious nature discussed. Under this head, the author classes "all foul, filthy, organic matter passing through its decomposition, whether terrene, miasm, malaria, or what not." Some of his critical readers will ask what means this "what not;" while others may perhaps good-naturedly exclaim: Why not a what not, as well as any other hard knot! Upturning of the original soil, of which mention has been already made, is spoken of with some detail. "The first epidemic yellow fever that is recorded here is that simultaneous with excavating the earth, in digging the Canal Carondelet, and more especially its basin, in 1797." Extensive exposures of new earth in making new basins, dredging the canals, deepening the ditches, &c., preceded the epidemic of 1853. In a subsequent section, the author makes instructive albeit not novel observations on the subject of ventilation, and the value of pure air, which is contrasted with the pure air of cities; also on water being spoiled by bad air. He next inquires into miasm as a supposed product of decomposed substances, and a specific agent in the production of fever, and expresses his disbelief in such a doctrine. He thinks that, "*whatever impairs the impurity of the air is pro tanto*, for the time being, the *miasm*, or rather the *malaria*;" p. 148. As we are not among the number of those who feel disposed to take up the challenge and do battle on the opposite side, we shall pass on to other matters; reserving ourselves, if need be, for a trial of strength on another occasion.

Dr. Barton affirms "as a universal fact, with the *exceptio probat regulum*, that filth of every kind, with heat and moisture, with sufficient duration, produces yellow fever;" p. 159. With a strong leaning towards

the side which he advocates, we do not entertain quite such decided conviction as he does on this point. There is probably an elimination of some subtle agency, which constitutes the poison of yellow fever; but that this is the product of filth exclusively, acted on by all admitted aerial and gaseous and electrical elements, we are not prepared to say. We believe, however, that this is the true line of etiological investigation, and that it, more than any other, promises to lead to a solution of the yet unsolved problem. We are not, therefore, of the number of those who would discourage, still less throw ridicule on the pains-taking inquirers who have noted down every change, every phenomenon presenting itself in the material world, which has been associated with the occurrence of yellow fever. It may be found eventually, that the perfect history of this disease will derive unexpected aid from the details introduced by such writers as Dr. Barton, and in still greater number and method by Dr. La Roche; just as, at the present time, we obtain a more intimate knowledge of the national character and state of society among the people of a country, in times remote from our own, by private journals and records of domestic life and of family expenses, than from all the state documents, and the acts and speeches, and battles, and conquests, which make up the received materials for general history.

Among the contributions made by Dr. Barton to the perfect history are, apropos of the parts of cities in which the yellow fever always breaks out, descriptions of the medical topographies of those in which the disease more frequently takes up its abode; such as Havana and Vera Cruz; and of others in which it has committed great ravages, such as Rio Janeiro. In this connection, he speaks of the causes which deteriorate the air of a city, and contribute to produce a slow poisoning of its inhabitants; and he designates the means of amelioration and cure, to be a better hygiene. Prefixed to the volume before us, is a "Sanitary Map of the City of New Orleans, exhibiting the location of the various nuisances, and other causes affecting the salubrity of the city, as shown in the occurrence of nearly 30,000 cases of yellow fever in the epidemic of 1853, &c., &c.," prepared by the author. In the body of the work are charts; one illustrating the influence of solar and terrestrial radiation and moisture, in the production of yellow fever in New Orleans; the other "exhibiting the annual mortality of New Orleans, per 1,000 of its population for each year, together with the causes, influencing or producing it, from 1787 (with a few exceptions) to 1854." These are the work of the author. Intermediate between them, are three Meteorologic Registers of New Orleans, kept by Dr. Barton. At the end of the volume are "A table of deaths in New Orleans during the year 1853, showing for each class of diseases the total mortality, and that of each month; also the sexes and colors, with the ages and places of nativity: compiled for the Sanitary Commissioner, by D. McGibbon, M. D.; and two meteorological tables (on one sheet) for the year 1853." They alone can fully estimate the value of the map and the charts and tables above mentioned, who should attempt to prepare anything analogous, or who are engaged in an investigation of a subject which requires for its elucidation the aid of similar illustrations. Such documents would alone entitle Dr. Barton to be exempted from any grave criticism for diffuseness in description, and the intercalation of matter not directly necessary to a narrative of the medical topography and climate, as explaining the cause of the yel-

low fever of New Orleans. If we might offer advice, it would be, that, in a subsequent edition of the present work, or in the preparation of one of an analogous character, on perhaps a more extended scale, he would throw into an appendix the disquisitions and details on public and private hygiene and the collateral sciences, which are now spread over his pages, and which, though valuable in themselves and germane to his theme, overlay and somewhat interfere with his free handling of what more especially belong to and constitute the essential part of his history, and the arguments included in it. At present, the work might well and quite appropriately be called *A Treatise on Public Hygiene, with a more especial Application to the Causes and Prevention of Yellow Fever in New Orleans and other Cities in America*. It is, we know, a somewhat unusual fault, if fault it be, in an author to give much more in his book than he promises in his title page; and if we advert to an instance of this nature in the case before us, it is that the labors of Dr. Barton may be rendered still more serviceable to his country and creditable to himself. If he were once to engage in the task of separating his present materials, and of re-constructing a new work out of them, he would require no critical friend at his elbow to point out redundancies and repetitions with some slips of logic. These he would see at once, and be the most eager to correct.

We must not conclude without some reference to the remarks of the author on the influence of social habits in the production of yellow fever. His views and experience on one of these habits, that of drinking intoxicating liquors, is stated in the following terms: "During the whole course of the sitting of the Sanity Committee, as a court of inquiry into the causes of the epidemic, and its great mortality, the inquiry was usually made of those we examined of the influence of social habits (intemperance) upon the liability to the disease, and on its results. The answer was almost uniformly, that it not only *increased the liability to attack, but greatly lessened the chances of recovery*. This is most singularly and impressively illustrated by the record I have received from the 'Sons of Temperance,' showing that of these about five hundred remained in the city during the epidemic, of whom, only *seven* fell victims to it, the proportion being 1 in 71-42 or 1-40 per cent.; the mortality of the balance of the city, of those who remained under similar circumstances, being 1 in 15-43 or 6-48 per cent., or nearly five times as many." The most eloquent commentary on this plain narrative could scarcely add to the force of the example, which it furnishes, of the protecting power of temperance.

On the subject of the mode of transmission or extension of yellow fever, from the spot in which it first breaks out, and from the persons who are first attacked, and of the means of prophylaxis, we cannot now speak; our scant limits only having allowed of a curt notice of the general scope of the work before us. The light in which the author regards these subjects, even if he had not made a more distinct declaration of his sentiments, is readily inferred from his views of the origin of yellow fever. These are of course entirely opposed to a belief in contagion, either direct or contingent, and to restrictions on freedom of person or of commerce, based on such a belief.—*North American Medico-Chirurgical Review*.

From New Orleans Med. News and Gazette.

*Obstetric Notes and Reflections.* By D. WARREN BRICFELL, M. D., Professor of Obstetrics, New Orleans School of Medicine. A case proving that Menstruation is not only Ovulation, with or without a sanguineous discharge; but that it is, also, the periodical exfoliation of the mucus membrane of the body of the uterus.

About six months ago, I was performing an autopsy in the dead house of the Charity Hospital. On an adjoining table lay the body of a stout young female, who was said to have died of disease of the heart. She had died a few hours previously, and was still quite warm. The thorax and abdomen were laid open. The body had been abandoned, and curiosity led me to examine the internal organs of generation. The uterus and appendages had been cut from the pelvis, and the anterior wall had been laid open. The parts had been thrown aside as possessing no especial interest. The moment I saw the organs I was struck with their being highly engorged with blood, and the uterus was considerably larger than usual. The pelvis was filled with blood which had flowed from the vessels when the organs were detached. The next thing that attracted my attention was the most palpable specimen of *recent corpus luteum* in one ovary. The corpus was large and prominent, and the depression on its centre, exhibiting the point of escape of the ovule, was evident beyond all cavil. In this same ovary one other Graafian vesicle seemed fully matured, the parts surrounding it being highly congested, but the ovule had not escaped. The other ovary was generally congested, but there appeared to be no mature Graafian vesicle.

But the most interesting feature in the case, was the *complete absence of the lining membrane of the cavity of the body of the uterus*. The moment my eye alighted on the inner surface of the organ, I recognized the woodcut of Tyler Smith, in the May, 1856, number of the *Lancet* (Amer. edition,) representing the inner surface of the uterus of a woman who died of apoplexy during the catamenial flow. Nothing could have been more striking than this resemblance; and if I had ever been skeptical in relation to the observations of the author, I was now bound to admit his accuracy. Down to the *os uteri internum* the mucus membrane was gone, and the inner surface of the organ rough, with innumerable blood spots scattered over it. All *below* the *os internum* was smooth, and in every respect natural in appearance. The difference in sensation conveyed to the finger by touching the two surfaces was as palpable as the impression conveyed to the eye.

The only doubt now remaining about the case was, whether it might not be the uterus which had very recently been delivered of an early ovum. More extended examination, however, proved clearly that this was not the case. The vagina was very small, and its mucus membrane highly corrugated; and there was a well defined hymen. To add to this, the mammae showed none of the changes generally produced by early pregnancy.

The subject was, to all appearance, about eighteen or twenty years of age, and quite robust. She was the subject of anasarca to a considerable extent, and was said to have died very suddenly—her death being attributed to disease of the heart. I tried to get a more accurate history of her



from the nurse of the ward in which she died, but as is too often the case, she only knew that such a woman had been in the ward, had lived, and then had died.

Tyler Smith says, "According to my view, the mucus membrane of the uterus becomes excrementitious every month, and is discharged from the cavity of the uterus in a state of disintegration, and the uterus forms a new mucus coat, by a process similar to the reproduction of lost parts." Coste and others speak of the exfoliation of the mucus membrane of the uterine cavity under certain circumstances; but, so far as I am aware, Tyler Smith is the original advocate of the theory above laid down. After reading all the observations I could procure on this interesting subject, I was altogether inclined to adopt this theory, and the case I have thus described only the more strongly tends to prove its correctness.

The specimen is carefully preserved in the museum of the New Orleans School of Medicine, and is certainly a valuable addition to the already extensive cabinet of rare and interesting specimens from nature.

*Meddlesome Midwifery strikingly illustrated.*—Late in the afternoon of January 8th, 1857, I was called to see Mrs. M. in labor. Found the patient a stout and healthy laboring woman, 26 years of age, and in her first labor. She had arrived at full term and had had no trouble during pregnancy.

Of course I found a midwife in attendance, and from her I gathered the following information. The patient had been taken in labor at 10, P. M., of the 7th, had worked steadily and well along in the first stage, until 10, A. M., of the 8th, when, thinking that she might expedite things somewhat, she ruptured the membranes, notwithstanding she did not think the os uteri was yet sufficiently open to allow the head of the child to pass through. With the evacuation of the waters all urine contractions ceased, and, to use her own language, "labor stopped." She now waited an hour or so, and as the pains did not return, she determined to give some ergot. She gave it in pretty free doses, and soon aroused the organ to a degree of contractile effort "worse than anything they (the friends) had ever seen." This lasted rather more than two hours, when all action again ceased, and up to the late hour at which I saw her, there had been no return. She was merely tormented by "gnawing pains" in the back.

I found her lying on her back, complaining bitterly of her protracted labor, countenance indicative of despondency, and although greatly fatigued and feeling "very weak," still without any *disagreeable* general symptoms. She was glad to see me, but thought it strange that she had not done well in such "experienced hands" as those of her midwife.

The following conversation now ensued between this midwife and myself:

"Can you feel the child?" "Oh, yes." "Is the mouth of the womb entirely open?" "Yes." "What part of the child is presented?" "The head."

I examined the patient per vaginam. Her first answer was correct. She could feel the child readily. The second answer was incorrect. The os uteri was not more than half dilated; indeed, it was rather rigid. The reader may judge how correct the third answer was, when I tell him, that instead of touching the head of the child, my finger passed immediately into the *anus*—the whole vagina being filled with meconium.

Auscultation revealed the fact that the child was still living, though the pulsations of the heart were both feeble and irregular. I waited on her an hour, when, on repeating my examination, I found the os entirely dilatible, but there was nothing approaching uterine action. Suffice it to say, that after waiting as long as I deemed consistent with the safety of the child (having, in the mean time, given ergot freely, but without the effect of arousing the uterus to further expulsive effort,) I passed the hand into the vagina, and hooking the finger in the groin, made traction on the child. This manipulation excited some degree of contraction, and in the course of half an hour the hips were through the vulva. The progress of the child, however, seemed to depend altogether on the traction, the uterus merely following it down. By the time the umbilicus of the child was extruded, I found that life was extinct—there being no pulsation in the cord. The shoulders were slow in rotating and passing through the vulva, and when at last the whole body was extruded, I found that the head, which was very large and well ossified, was detained at the superior strait by the forehead impinging firmly on the linea-ilio-pectinea. The work of remedying this evil, by pushing the occiput up and pulling the forehead down, was quickly done, but the child was still-born.

Finding now that the uterus was contracting imperfectly, and that blood was flowing pretty freely, I passed my hand in and withdrew the placenta. I found it lying loosely in the os uteri, and it came away very readily, its delivery being followed by a free gush of blood. Friction and cold applications over the uterine region, however, brought on a sufficient degree of contraction to place the patient beyond danger. The child was very large indeed. I could not procure scales to weigh it, but I am sure it would have weighed ten pounds.

I have never seen a case more strikingly illustrative of the worse than ignorance of what are usually termed “midwives”—old women who pursue the business of attending their sister women in labor as an actual trade. Here is a woman taken in labor with her first child; there being a “breech presentation,” the first stage of labor progresses slowly; the midwife (woman of enlarged experience, and consequently very learned in the business,) becoming tired of waiting on the operations of nature, and being perfectly ignorant of the cause of the delay, ruptures the membranes prematurely, and brings all the force of the uterus down on a child which cannot possibly escape, because the os uteri is not yet sufficiently dilated for even the hips to pass through. But after the membranes have been ruptured, there is “an interval of repose; nature has been much fatigued with her efforts in the first stage, and she stops by the wayside to rest. But this is all wrong, says the wise midwife, and I am in a hurry to get home; I will *help* her. Ergot is poured down, and soon nature is aroused from her slumber; and then come uterine contractions “worse than any thing they had ever seen.” In two hours the uterus is worn out by ineffectual efforts to expel its contents, the midwife can do no more and the doctor is called in. A few questions put to the midwife not only prove that she has been meddling with the case, but that she is ignorant in the extreme. She not only did not know a rigid and undilated os uteri when she felt it, but absolutely mistook the breech of the child for the head.

*On the general use of Chloroform.* By DR. M'LEOD.

In the Medical and Surgical Society of London, (May 1856) Dr. M'Leod read the following paper on the general use of Chloroform :

The author began by remarking on the necessity which existed for all surgeons clearly making up their minds on this important subject, and thoroughly studying the question in all its bearings. He proposed to run rapidly over the different points of practical moment presented by a consideration of anæsthesia; and to submit the question as clearly as possible before the society, with a view of eliciting from its members an expression of their opinion on the subject. Dr. M'Leod referred at the outset to the experiments of Mr. Nunnely and Dr. Simpson, instituted for the purpose of determining the relative value of different anæsthetics, and stated his intention of confining his observations in what followed to chloroform, as being the only anæsthetic of practical value. He then reviewed the different hypotheses which had been started to explain the physiological action of anæsthetics when inhaled, and gave his adhesion to that view which ascribed it to absorption into the blood, and its being thereby carried to the nervous centres. The fact that both the chloroform and ether can be detected in the flesh and blood for a considerable period after they have been inhaled, the author thought, went a considerable way to support that view. Dr. M'Leod then dwelt on the modes in which anæsthetics, when inhaled, might cause death. He showed that in those cases which had ended fatally, as well as in experiments conducted on animals to determine the question, the most constant appearances were these: 1, a highly congested state of the pulmonary tissues; 2d, an engorged state of the right side of the heart, and an empty state of the left; in other cases, a flaccid condition of the whole organ; 3d, a congested state of the brain. These, with an altered condition of the blood itself, seemed to be attributable to the drug. Death, then, had been ascribed to—first, asphyxia, caused according to some, by the arrest of the chemical changes carried on in the lungs; and, according to others by the capillary vessels of the lungs; second, to coma, caused by the action of the vapor in the nervous centres; and third, to syncope, caused either through the various centres, or from the overaction of the blood in the heart itself. From a careful consideration of the fatal causes, death, the author thought, was sometimes due to one of these modes, and sometimes to another, and at times to two or more of them combined. He showed that all arose from the employment of the vapor too little diluted with atmospheric air, and were to be avoided by carefully guarding against such an error in the administration. Dr. M'Leod next alluded to the fallacy of allowing theoretical notions, as to what parts of the nervous system are at any particular period of the administration being implicated, or as to how many drops are necessary to produce such and such effects, to interfere in the practical employment of anæsthetics. Such attempts only withdraw the mind from the real points of importance, and lead to erroneous practice. He contended that all apparatus was not only uncalled for, but absolutely injurious, as tending to frighten the patient, and prevent the escape of the expired breath. He said it mattered not whether we measured the amount of the liquid the patient had inhaled or not, so long as we are guided by effects. The propriety of keeping the patient from food for some hours previous to the administration of the anæ-

thetic, the necessity for quiet during the administration, and of allowing a free circulation of pure air around the patient, were dwelt upon, and great weight was put on the recumbent position being assumed in all cases during the exhibition. The removal of all constrictions of dress about the neck and chest was insisted on, as well as the necessity of observing the temperature of the apartment, as Dr. Snow had shown how great a difference existed in the amount of vapor set free at different elevations of temperature. The advantages of bringing the patient rapidly under the influence of the drug, while a large amount of atmospheric air was at the same time admitted, was pointed out, and the author proceeded to show that the discrepancy of opinion as to the "*upholding effects*" of chloroform arose from the degree of action established; that, if not carried beyond a certain point, the effect was certainly of a supporting character; and that the depression spoken of by observers was the result of a larger amount of vapor being administered than was justifiable. The respiration was shown to be the great guide in the administration of chloroform. The eye, too, being upturned and fixed, afforded no information as to the establishment of the action, but neither the pulse nor the pupil communicated anything. The propriety of observing the color of the lips and countenance, and also the flow of blood from the cut vessels, was declared to be of consequence as affording indications of the approach of syncope. The author stated his conviction that age, sex, diathesis, idiosyncrasy, were matters of indifference in administering chloroform, if we are guided by effects. Having referred to the combined use of chloroform and ether, the author went on to speak of the proper steps to be taken in the event of an overdose. As the chief danger was seen to arise from the use of the vapor in a state of too great density, or from its accumulation in the system, the great remedy was shown to be the free admission of pure air, and the employment of artificial respiration, if the patient was too deeply affected to work off the over-charge by his own exertions. The wonderful manner in which the respiratory movements may be excited by galvanism was then referred to. The method of raising the epiglottis by the finger, or by drawing forward the tongue, as recommended by M. Regneult, was strongly advocated, and the assistance obtained in producing the desired result by dashing cold water on the face and chest noticed. If the danger arose from syncope, the propriety of applying stimulants to the nostrils, and using them by the rectum, or the direct stimulation of the heart by needles, or the actual cautery, were pointed out. The method of inverting the patient, recommended by M. Nelaton in such cases, was also detailed. No fluids should be given by the mouth for some time, till the patient had become conscious.

The author summed up this part of the subject by recommending in all cases the admission of a stream of fresh air, the drawing forward of the tongue, and the application of cold water to the face and chest. If death appeared to approach by syncope, stimulate the heart by one of the ways mentioned, and depress the upper part of the body. If by coma, or asphyxia, use artificial respiration produced by the hands, or electricity. The use of anæsthesia in the practice of medicine was then shortly reviewed, and shown to be chiefly attended with benefit in relieving pain, however arising. Its employment in many diseases, implying lesions of sensation and motion, was dwelt on, together with its use in cases of mental affections. In the paroxysms of many spasmodic and neuralgic affec-

tions, it was shown to be invaluable. Surgery, however, was declared to be the real province of anæsthesia, and that in which its benefits were more gratefully recognized. The advantages accruing to both the surgeon and patient, were pointed out, and the cases in which it was employed were stated to be reducible to those in which pain or spasm were to be allayed. Dr. M'Leod emphatically denies that there was anything in gun shot wounds which made the use of anæsthesia in these less beneficial than in the same accidents of civil life, and he contended that the pain and suffering in these cases were very great, so much the more necessity existed for its use. He stated his conviction that the mental state of the patients, who were the recipients of these two species of injuries made no real difference in this question. Shock and pain are the most frightful causes of a fatal issue both in primary and secondary operations; and as these two evils were avoided by the employment of anæsthesia, we should naturally expect to find that the mortality succeeding capital operations had decreased since the use of anæsthesia had become general, and this the author would presently show was the fact. In the examination, adjustment, and dressing of injuries, in the employment of instruments to cure disease, in the reduction of Hernia, and dislocations, and, in short, in all those instances in which the surgeon's interference caused pain, or in which it was desirable to prevent any muscular opposition on the part of the patient, the use of anæsthesia was shown to be invaluable. Its use in tetanus during the war was spoken of, and the fact stated that in one well marked case at least its continued use had been followed by recovery. Dr. M'Leod thought that in the General Hospital its use had been, beyond all question, successful, and he did not agree with Mr. Monat, who read a paper on the subject at a former meeting, that in the cases there or elsewhere it could be fairly said to have produced any disagreeable consequences. The very few cases in which it had been said to have given rise to unpleasant or fatal effects contrasted strongly with the multitude in which it had been successful, in which it had obviated pain and saved life. The writer next glanced at the various objections which had at various times been made to the use of anæsthesia, and showed how false both theory and practice had proved them to be. He also alluded to the many operations which were now practicable and hopeful, which before the discovery of anæsthesia were unattainable. To military surgeons, the detection of feigned disease was a matter of simplicity, and many of the questions which divided them in opinion were now much changed in their bearings. All objections to primary amputations were now set aside and the doctrine of "making the knife follow the ball," had received a new and important support. The writer expressed his strong conviction that shock was not established till some time (the direction being different in different injuries, and persons) after the receipt of an injury, as by a ball, and he felt sanguine that an operation under chloroform performed in this interval, would obviate much of the succeeding shock, by removing its cause. He was sorry that during the last siege, which was so manifestly favorable for testing this, so few attempts had been made to carry it out. In conclusion the author having stated his opinion that no case absolutely forbade the use of chloroform, referred to those in which its administration should be carefully watched. Operations on the back of the mouth, from the danger of blood getting into the throat; cases of severe hæmorrhage, or lung suppuration from the activ-

ity of the absorption ; acute disease of the lungs from the irritation caused ; disease of the heart, particularly in active dilation, with weakening of the organ, on account of the fear of fatal syncope ; aneurismal disease of the aorta or marked apoplectic diathesis ; and cases in which fatty degeneration may be suspected. These seem to comprise all those cases in which extra caution was necessary. That care should be taken that the agent employed should be pure was insisted on, and the tests to determine the presence of adulterations were stated. Dr. M'Leod next gave the statistics furnished by Mr. Skey, Dr's. Simpson and Snow, and MM. Velpeau and Bouisscau, as affording a large amount of evidence in favor of chloroform in surgery, as not only proving its beneficial influence in relieving pain, but in directly saving human life ; and he stated that while, during the past war, it had been administered in innumerable instances, only one death had followed its use ; and in that case the patient was not placed in the recumbent posture. While expressing his own belief that, if administered with proper caution, chloroform, might, with perfect safety, be employed in all those cases which fall to the care of the military surgeon, in which it is desirable to overcome pain or spasm, or muscular exertion, the author called on the members of the society to give a clear and decided verdict on this important subject, founded on the experience of this great war, which would forever put this question at rest, and remove all doubts as to their appreciation of the immense benefits bestowed on humanity by anæsthetics.

Dr. Blenkins understood the author to say, that one fatal case had taken place, whereas he believed more had occurred. He felt very much obliged to Dr. M'Leod for a highly interesting paper, and considered the author had gone most fully into his subject. He (Dr. Blenkins) trusted that each individual would give his experience of the use of chloroform, without any view to opposition, but for the benefit of all. In his practice, chloroform had been just as successful in the Crimea, in severe operation, as at home ; and he quite agreed with the author, that there is no difference in the effects of accidents in civil and military life ; he had not seen any ill effects in any one of his cases. He did not regard chloroform as a drug to be treated with carelessness and indifference, but with great care ; we should watch the pulse and respiration. Objections should not be made to its use in easy operations without a fatal termination. He remembered one case, that of an old soldier, where the patient was a very long time before he perfectly recovered ; but this was owing to the length of time it took to get him under the influence of the drug ; and this, again, was accounted for by his addiction to strong drinks. The theory of its action would occupy too much time for him to enter upon now. He expressed his conviction that chloroform acts through the blood and looked on it as a remedy requiring vigilance in its use. He had operated fifteen times under its influence, besides having given it in tetanus, fits, &c. He believed it to act as a stimulus, and to raise the pulse when low. On one occasion he was obliged to remove the head of the femur at night, with only one assistant, and he believed it almost impossible to have done so without the aid of chloroform. In conclusion he begged to state that all his observations agreed with those of the author.

Dr. Sall considered that the society was much indebted to Dr. M'Leod for the very valuable and lucid paper which he had just read ; and as we are not confined to-day to the discussion of chloroform in cases of gun-

shot wounds, he begged to state that he had used it with the most marked success in cases of delirium tremens, and he had found it a more beneficial mode of treatment than the stimulo-narcotic plan. He then alluded to the case of a youth in a band of the 93rd Regiment, who after suffering much distress of mind, from disappointment, relapsed into a state resembling hysteria, accompanied by a complete cataleptic condition, in which he remained for twelve hours. In this case a variety of stimulating plans of treatment were tried without success, but under the anæsthetic use of chloroform the boy quite recovered. He considered that in the administration of chloroform there were two things necessary to be borne in mind—the purity of the drug, and the correct mode of administering it. He (Dr. Sall) had never witnessed an unfortunate result from its use.

Dr. Bowen had never heard a more practical paper, and he agreed entirely in the views of the author. He had seen anæsthetic agents used for the last six years, and had given them himself between 2000 and 3000 times. He considered that the best mode of administration was by means of a napkin, as now stated by Dr. M'Leod. As regarding the purity of the drug, he was only surprised that more accidents had not happened from its frequent impurity. He had detected both free chlorine and pure muriatic acid in different samples furnished twelve months since to the Military Hospital at Plymouth. It had been given by himself for fourteen hours to one woman; and Professor Simpson, in a case of convulsion in an infant, had given 100 ounces within a period of two weeks, with most beneficial results. He had been informed by the Russians, that throughout the siege chloroform had been used with only one or two fatal results, which was not surprising under the circumstances: it appeared that their mode of administering it was the same as that now recommended.

Mr. Howard considered that in delirium tremens it was invaluable; by its means he had procured sleep, when opium could no longer be given with safety, and after every other means had absolutely failed.—*Lancet*, Oct.—N. O. Medical and Surgical Journal.

*Cogitations and Vaticinations.* By an OLD FOXY.—*The Physiology of the Hebrews—the Pathology of the Greeks—the Chemistry of Dr. Draper.*

More than three thousand years ago the great Lawgiver of the Jews announced the fundamental principle of medicine, *namely*, that the blood is the life of the animal system. I can not just now give the exact words, but this is the exact sense of them. They will be found in the book of Numbers or of some other one of the Pentateuch. "*The blood is the life thereof*"—no doubt about it. But how did Moses learn this? were the learned men of Egypt so far advanced in medical science at that early day as to be able to teach such generalizations as this? I doubt it. About a thousand years later, more or less, Hippocrates taught that altered life, or altered vital action, or diseased action, call it as you please, results

from morbid humors in the blood. How remarkably the physiology of the Hebrew and the pathology of the Greek agree ! First, of the physiology. And is the blood "the life thereof?" I experiment—I take away the blood from an animal—all that I can get away ; and sure enough he is dead. I then reduce this amount in a part as much as I can ; and the vital action of the part is lowered or annihilated. The functions of the brain are suspended, and there is a fainting as soon as the heart ceases to send to it its accustomed supply of blood. I look at the parts as they exist in health. Have those the most life in which there is most blood ? It is so. The bones have less than the muscles—the cartilages and fibrous tissues less than the brain. I now launch out with comparative physiology. Are these torpid hybernating animals of the lower vertebrata, not possessed of blood as well as the higher animals and man ? They are, but their blood is not so highly oxygenated. And what of the non-vertebrata and those animals which have no red blood ? are they not alive ? They are—but they have an inferior quality of blood, and hence have inferior life. Yes, even the lowest cell has its blood ; "it is the life thereof," as much as the crimson current that dashes through the brain of the impassioned orator "is the life thereof." Be not afraid of materialism here ; mind or soul is something more than matter, as I shall demonstrate one of these days. I am now speaking of life, which is a very different thing. But even vegetables have life. Yes, and they have too, their blood—and their vital actions correspond to its variations and quantity and quality. It is true, then, as far as observation can go, as far as thought can reach or science can define, that the blood of the whole organized creation is the life thereof. Interrogate nature, from the Behemoth down to the insect of a day—from the cedar of Lebanon to the hyssop on the wall—and the unfailing and unanimous answer will be, "*our blood is our life.*" "The blood is the life thereof," is spouted by the whale amid the surgings of the sea ; it is roared by the lion amid African deserts and Indian jungles ; howled by jackalls in the streets of deserted cities ; bleated and lowed by "the cattle of a thousand hills ;" trumpeted by the cock, the clarion of the morning ; humm'd by the "shar'd-borne beetle" and his myriad train in the drowsy ear of night ; croaked in the baritone of the ominous raven ; hymned in a higher key by the ascending lark ; sung by the nightingale in the umbrageous grove at eventide ; hooted by the solemn owl, and hissed by serpents in their dens. It is whispered audibly in the ear of reason, in the deep abysses of organization which only the microscope can reach ; it is chanted by the choristers of spring in green valleys, and screamed by eagles on the mountain crags. The primeval forests teach it. It is spoken forth by the rose of Sharon and the lily of the vale in their budding, in their bloom and their decay ; and man and brute, vegetable and animal, health and disease, pleasure and pain, life and death—all organized Nature with her myriad voices, loud as the seven thunders of the Apocalypse, cry *amen* to the words of the prophet.

Of course, changes in the blood would constitute disease according to Moses. Hippocrates thus viewed disease. Let us examine. Can there be any disease without some change, quantitative or qualitative, of the blood ? No. But which has the priority—the blood or the solid ? Evidently the blood, in nearly every case of disease—unless you choose to call a broken bone or a dislocated joint a disease. The congestions, the



inflammations, the anemias, are changes in the amount of blood in the parts—the solids are changed afterwards—the hypertrophies, the atrophies, the growths and deposits, follow previous blood changes, as everybody now knows or will know. The essential fevers are changed qualities or empoisoned states of the blood, as everybody now admits. In what a round-about, ignorant, grandiloquent way the solidists used to explain fever. “The morbid agent being a poison generated by heat, vegetables and moisture, (the fact is, there is very little evidence for this poison, and I vaticinate that it will have but few advocates to commence the next century with,) gets entangled in the spittle and is swallowed—(it could not get into the lungs though already dissolved in the air!)—is swallowed, and acts on the sentient extremities of the nerves, which convey the impression to the brain, which reflects the impression to the heart and organs in sympathy with it, arousing their synergic action by a catenation of morbid links which constitute the totality of the chain of sympathies, direct and reverse, homogeneous and heterogeneous, and thus excite the re-active process and its results in accordance with well known physiological and pathological laws, and which re-active process constitutes the phenomena essential to fever. With this simple statement we proceed.” No, you shall proceed no further. Why could you not have said: “The poison being in the air enters the blood through the lungs, and produces the phenomena of fever in a manner not as yet well understood,” or have offered any explanation that occurred to you in a few plain words. Words in medicine are like the locusts of Egypt—they darkened all the land.

I propose to say a few words regarding the essential fevers. Nothing better can be expected of an old foggy, than that he should adopt the views of Hippocrates, which may be expressed in three words, *poison, coction, crisis*; or, to indulge a little more freely, there is a peccant humor, a moteries morbi, which enters the system or is generated in it. This humor causes certain actions and re-actions in the system by which its finally expelled through the various emunctories—excepting always those cases which terminate in death. I accept this doctrine with its *vis medicatrix*. God help us, if there were no *vis medicatrix natura*! all the homœopaths would starve to death to begin with, and most of the patients of the regular physician would die; for without the curative power of nature, but few diseases could be cured. We might adjust dislocations, reduce hernias, perhaps repercuss a congestion.

There are three things mainly to be considered about these fevers. The stages of depression, re-action and crisis, by sweat, urine, &c.; all the essential fevers have these stages. The first stage is caused by the presence of the materies morbi in its unconcocted or unoxydized state. It is clear, that such a condition of the blood would diminish that degree of oxydation of the tissues of the organs on which their vital activity is dependent. Hence the langour, the depression, the chill—but this state of the blood is a stimulator of respiration. The presence in the lungs of blood requiring oxygen excites the breathing. Why? why does the kidney secrete urea; It is a first principle we can not go beyond. The unoxydized or imperfectly oxydized peccant humor, then, causes the chill and excites respiration, which introduces an increased amount of oxygen, by which oxygen the peccant matter is oxydized, and re-action or fever is brought about. With the elimination of the concocted or oxydized

matter the fever ceases. Doubtless, unoxdized material is also thrown off, and this will explain the fetor of the discharges often observed.

But how do we know that there is a *materies morbi*? Why, when we see the disease ceasing in thousands of instances, when something has been cast off, as large amounts of urine charged with lithates, or copious sweats, loaded with lactates and fetid matters, as immense ejections and dejections of bile. I say, when we have seen this a thousand times, the conclusion is irresistible that the cause of the trouble was something whose presence constituted the disease, and whose elimination was necessary to the cure. Furthermore, we can imitate these fevers by introducing foreign substances into the blood as pus, the matter of small-pox, &c. We can introduce substances which will cause the phenomena of fever, and then detect them in the excretions; and still further, in these essential fevers the blood is obviously changed—it looks differently from healthy blood. Encore; our knowledge of the causes of these diseases forces us to the conclusion that these are morbid matters in the blood. Typhus arises where the crowding is great and the ventilation imperfect, amidst filth and impurities. The blood can not get rid of its effete matters under such circumstances. We handle the *materies morbi* of small-pox, and introduce it into the system. No one doubts the existence of the *materies*. Talk about sympathy! Certainly there is a sympathy between every organ and every other organ; that is to say, they affect each other in consequence of their connection with each other by blood-vessels, nerves, &c. Sympathy is a fact; it is not an explanation. Explain to me, dear sir, the sympathy between the kidney and the brain by which narcotism follows, *ischuria renalis*—explain this sympathy; and what did the grave professor answer? He said, “oh, it’s by sympathy!” Yes, the sympathy between the organs is caused by sympathy—and so does opium narcotise by its narcotic properties. Explain to me, the sympathy of A and B. The answer will be, “oh, it is a fellow-feeling, I suppose!”

Having gotten rid of sympathy and sound, let us return to our *materies* and sense. The *materies* exist, but what is their nature? what are they? How many kinds are there? These questions are not so easily answered, at least in regard to all the fevers. There is a measly *materies* in measles, &c., but what is that measly material? What does it come from? The *materies* of our summer and autumnal fevers, our bilious intermittents and remittents, including yellow fever, appears to me to consist in the carbo-hydrates which the lungs fail to eliminate in the form of carbonic acid and water. I will briefly state the evidences of this proposition: In the first place, bile, which is mainly formed of the carbo-hydrates, is eliminated in large quantities in those diseased, and is evidently itself or in its constituents a part of the *materies*. Secondly, the liver is allowed to be adjunctive to the lungs in ridding the blood of the carbo-hydrates; the lungs separating them in the form of carbonic acid and water, and the liver in the form of bile. Of course, when the lungs fail in a degree in this eliminative act, the liver is excited to increased action; and thirdly, the experiments of Vierordt show, that twice as much carbon is eliminated *per diem* from the lungs in cold weather as in hot—twice as much when the thermometer is at 32° as when it is at 86 or 90°. These experiments certainly explain the bilious disease of hot weather; nothing more is necessary to show that the carbo-hydrates and bile are the *materies morbi* of these hot weather fevers. There may be something more

than this, but it is not necessary to look further for a *materies morbi* sufficient to explain the phenomena of these diseases. In yellow fever, it may be urged, that there is often in the worst cases no secretion of bile. True enough, the dark dissolved venous condition of the blood in these cases leads rapidly to congestion, black vomit and collapse. The liver has neither the power nor the time to manufacture bile. A thousand facts might be brought to bear favorably on this theory—the fact that these fevers occur only in hot weather; the fact that no external poison or miasm has been discovered; the fact, that those most exposed to overheating are mostly its victims; the fact mentioned by Dr. Dowler, that the inmates of prisons escape it; the fact mentioned by Dr. Fenner, that bakers are very liable to be attacked; the fact that drunkards and gluttons are almost sure to have the disease, their blood being loaded with carbonaceous matters; the fact that northern men coming to the south are so liable to attack, that the fever has been called the “strangers’ fever,” but he must be a northern stranger (mind that); the fact that northern folks in general live on a richer respiratory diet than those of the south, because the former need more heating than the latter; the fact that good ventilation is found to be the best remedy; the fact that jack-frost puts a stay to the disease; the fact that—but I have mentioned facts enough, and he who will not believe after considering even these, will not believe “though one rose from the dead.” I am bound to write an especial essay on yellow fever before long. Now I will not deny the agency of other things altogether; why should I? who can force me to do it? Dampness, misery, foul air, may aggravate. Decaying vegetables, by absorbing oxygen and throwing off carbonic acid, may impoverish the air of its oxygen, and poison it to some degree with carbonic acid, in various localities. There is no positive malaria necessary. I vaticinate that no one will be found in a quarter of a century from this moment to deny that billious fever and yellow fever differ only in degree.

I shall not have so much to say in regard to eruptive fevers. Their *materies* it is more difficult to get at; that they consist of waste tissue in process of oxydation may be reasonably presumed. Just think of muscle and nerve as they are dissolved in the metamorphosis of nutrition remaining in a half oxydized state—half-way between tissue and urea. Surely they would constitute *materies morbi*, and it is an universally admitted fact, that many of these fevers, as typhus and typhoid, arise under circumstances unfavorable to oxydation, as amongst the crowded poor. The waste tissues have to be oxydized before they are eliminated. No doubt that typhus, even admitting it to be contagious, is often generated *de novo*.

Small-pox. Well, it too is generated *de novo*. Where did it come from? Evidently it was generated first in the animal system. It did not tumble out of the fatal box of Pandora amongst the fabled curses of the gods. Introduce a small portion of small-pox matter into the system, and in a week or so this system will furnish a pint of the same matter. Where does the increase come from? from the blood, that's clear. What part of the blood? Why, when you come to look at the blood after all is over, it is the same as it was before; but this makes no difference, a portion of the fibrin or albumen may have been converted into variolous matter and then been reproduced. But this can not be for another reason. *viz.*, the system is after one attack, insusceptible of another, which would not be the case if any of the reproduced elements of the blood.

furnished the *materies morbi*. That which furnishes the morbid matter is then something which is passing from the system never to return. Certain circumstances, I know not what, sometimes cause the matter to pass into the variolous transformation, and this matter is capable as a sort of ferment—I say, a sort of ferment, or as a sort of catalytic, of converting to its own nature all similar matters, by contagion, in other systems. But if this decaying matter which renders us susceptible of the disease has already been oxygenized and eliminated, then we will not have it though the contagion be present. If we have but little of it in the system, we will have a slight attack only. The decay of what tissue is it that furnishes the material of small-pox and other contagious fevers which affect the system but once in a life-time? This, no man can tell, and I would merely remark, that Dr. Simon has guessed as ingeniously in regard to these things as any one else. He suggests that the decay of certain organs which are found only in intra-uterine and infantile life, but which pass away as age advances, may furnish the materials of these fevers—as for example, the thymus gland, supra-renal capsules, temporary cartilages, &c., &c. Which one of them furnishes the material for any particular contagion, he does not even venture to guess. All these things will be cleared up

“In a brighter and a better day.”

The chemists are to be invoked. Such works as those of Simon, Lehman and Dr. Draper are to be studied. Man, like other material beings, is composed of oxygen, carbon, nitrogen, hydrogen and other elements, whose affinities and re-actions are just the same in him as outside of him. His food is a combustible material in the crucible, and is burned in the blood to give animal heat, just as really as charcoal or wood is burned in a stove to give out heat—that portion of it which goes to form his tissues is oxydized or burned in the performance of the functions of these tissues. The “*vital flame*” is hardly a figure of speech; it is a reality. The atoms yield up their ghosts to swell the vital forces of the system to which they belong. How many thousands of them die to enable the athlete to run a foot-race! How many thousands perish in the orator’s brain in the impassioned speech of an hour! Young gentlemen of the medical profession, listen to an old foggy, who can expect to do no great deal himself. His days are pretty much passed. Turn your minds to chemistry, to chemical physiology, if you would thread the labyrinths of pathology and therapeutics. There is no other way. Old foggy as I am—born out of due season—I intend to make the best of my remaining days by following the advice I give to you. Yes, I will learn my alphabet, the elements, and study their combinations, the syllables, and words, and sentences, which make up the great book of nature, and stop only when Death says, “Old Foggy, your task is done! you need not mind living any longer.”

Dr. Draper’s *Physiology*—or chemical physiology, as I might term it—recently published, is perhaps the greatest work ever issued from the American press. It ranks with the kindred work of Lehman, but is much more readable and plain. Most of what he has said may be found in other works, but his one volume (I like one volumes!) contains the sense and contents of pretty much all of them. It is especially adapted for students and practitioners. The reading and studying of it, is worth the reading and studying all the medical practices of the last century. I mean what I say, Mr. Editor—read the book and you will agree with me.

Yes, chemistry is the road to certainty in medicine. There can be no difference of opinion on this point. We have started *at the beginning* now, unless it turns out that oxygen and carbon are compounds, which I hope will not happen.

It is vexatious to see the little sensation created in the world by men of genius and industry toiling in the noble cause of science; whilst the noisy politician and courtier, with not half the merit, are gazed upon and lauded by a hemisphere. But it is consolatory to believe that the man of science will live longer, if not so fast, in the memory of his species. Hippocrates will be talked about as long as most of his contemporaries. Boerhaave will be remembered as long as Peter the Great. Draper's fame will prove as undying as that of the most eminent politician of his age. When he is forgotten there will be nobody living that heard or read of Webster or Clay—and why should this not be so? What study is more noble than that of man—man in health and man in disease? Is improvising a few arbitrary laws in the senate chamber nobler than seeking out and following the everlasting laws of Nature? I trow not. What subject requires more severe study and more power of thought than medicine? None. The Ciceros, the Burks, the Websters, the Aragons, the Herschells, the mighty men of other Departments of thought and action, could not have done more than has been done by the worthy-to-be-called demigods of our noble profession. The difficulties of other sciences shrink into insignificance when compared with that of medicine; most of them have to be learned preparatory to setting out to explore its wide, wide sea. The thought and research that have been devoted to medicine are sufficient to have made all the discoveries in astronomy, navigation, mathematics, geography and geology, a thousand times over. The good days of the profession are coming. Medicine is to be a science in the highest sense of the term. Quacks, like some ancient reptiles, will be known only as fossils; and, concerned as we are with the highest interests of Nature's master-piece, our profession will take the highest stand of all things which are purely human and sublunary.—*St. Louis Med. & Surg. Journal.*

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*Extracts from the Records of the Boston Society for Medical Improvement.* By F. E. OLIVER, M. D., Secretary.

Feb. 23d.—*Growth of a Horn.*—Dr. H. G. Bigelow showed a specimen of horn removed at the Hospital, by Dr. Cabot. The patient, aged 42, married, had always had a large mole where the tumor was situated, at the top of the back, half an inch to the right of spinal column. She had never had an extraordinary feeling in it until about a year ago. It then began to be sore, when she lay on her back, or when her dress bore upon it. The bunch then commenced to grow, until it had risen a little above the level of the surrounding tissues. It is hard, about the size of a filbert, and immovable on account of its firm, deep attachments. She had recently had acute lancinating pains in and about the growth. Her

general health had been good, nor was there any cancerous disease in the family.

The tumor was enclosed above in a sort of sac, which enveloped its horny tip. This surmounted a mass of concave epithelial layers, arranged like a pile of cups, corresponding to the matrix of a nail. The length of the tissue constituting the matrix was three-fourths of an inch; that of the horn, one-fourth an inch; the whole being of the diameter of a swan's quill and buried in the fat. The horn was about to perforate the cutis by ulceration.

Feb. 9th.—*General Affection produced by the application of Atropine to the Eye.*—Dr. Bethune mentioned the case.

On finding that the pupil did not dilate on application of a solution of atropine containing one grain to the drachm, an application of double this strength was made three times successively. In the afternoon the patient was attacked with delirium, there being also uncertainty in his gait, with absence of sleep and difficulty of swallowing. On the day but one after, he had another attack of delirium, somewhat resembling *delirium tremens*, seeing imaginary persons in the room. On the following day he was well.

Feb. 23d.—*Unusual Sequela of Scarlet Fever.*—Dr. Cabot mentioned the case.

The patient was the father of two children who had both had this disease. The eldest of the two had last taken it, and during the first week of its progress the father was seized with the sore throat. There was no eruption; there was, however considerable prostration, fever, and pain in the bones. The urine was cloudy, and dark colored, but contained no albumen at the time Dr. C. saw him. In various parts of the body small spots soon after appeared, which became painful, and were followed by suppuration, having the characteristics of that following phlegmonous inflammation. There were two of these spots on one arm, and one on the other; also one over the region of the sacrum as large as the palm of the hand. The patient is still under treatment.

Feb. 23d.—*Recurrent Tumor of the Orbit.*—Dr. Bigelow showed a portion of the diseased growth removed by him from the patient whose case was reported at the first meeting in January, and who had been operated upon by himself before that date. The upper surface of the bony orbit itself being affected, Dr. B. did not attempt another operation for the removal of the disease. Although, as Dr. B. remarked, the disease is microscopically innocent, it is clinically malignant, and nothing further can be done for the patient.

FEB. 23d.—*Ovariectomy, and the operations for Ovarian Disease.*—A question of Dr. Jackson as the probable cause of the ill success that had attended the recent operations for ovarian disease in this city, led to some discussion in regard to the relative propriety and success of the various operations which have been and are still in vogue in this disease.

Dr. Cabot alluded to the success that had attended the operation in Paris, by injection of the tincture of iodine, and the favor it had consequently found with French surgeons. Little trouble seemed to follow the operation, except, in a few cases, some degree of inflammation, and, in some instances, the iodic intoxication. In view of the great array of successful cases, he was inclined to consider this mode of operating as on the whole the safest and best. He spoke of the quantity of the tincture of

iodine used by the French surgeons, as important in preventing the putrid suppuratation so liable to follow this operation.

Dr. H. B. Bigelow had formerly operated twice without success, and for a number of years has declined to do the operation of ovariectomy. It put the patient in great danger, and, from the frequency of the operation out of town, it is probable that there are unrecorded cases which would increase its estimated mortality. In this class of cases, the surgeon encounters a large number of patients, young and old, solicitous to be relieved from a disease which subjects them to discomfort, and sometimes to annoying suspicions; many being still in the enjoyment of tolerable health, and with a fair prospect of life for some years. In fact, these last are the most favorable cases for ovariectomy. There is no surgical operation at once so frequently offering itself, and so largely and immediately fatal, to patients in a comparatively comfortable state. The injection of iodine and the permanent canula are both useful chiefly in the case of unilocular cysts, which are quite rare compared with the usual multilocular form of disease, and not to be distinguished with certainty from the latter. Dr. B. referred to a fatal case resulting from each of these methods of treatment. Tincture of iodine is composed of iodine and alcohol. Alcohol alone would probably be as efficacious an injection in a variety of cases usually treated by injection of the tincture of iodine. The frequent and careful washing out of a large ovarian cyst with a bland fluid after operation, to remove decomposing or acrid discharge, or even of the peritoneal cavity, as recently detailed in a case of Prof. Peaslee, doubtless tends to procrastinate or avert a fatal result.

Dr. Warren remarked that these cases in London had generally been in the hands of specialists, and that he had not seen the operation performed in any of the principal hospitals of that city. He had himself operated by the injection of iodine, but without effect. He alluded to a case in which Dr. Simpson, of Edinburgh, operated in this way. Eight ounces of the tincture of iodine were thrown in. The operation was followed by pain, swelling, and other constitutional symptoms of considerable severity, from which, however, the patient recovered. He thought it important to ascertain, if possible, the result in these cases after the expiration of a considerable time.

Dr. Coale alluded to the fact that the time required for the sac to re-fill after tapping, varies in different cases. In one case in which he operated, in May, 1853, no further operation had as yet been required. Nine pints of a dark-colored and tenacious fluid were thrown off.

Dr. Gay said that some cases recover from simple tapping, and others from local and constitutional treatment. He mentioned cases on record where recovery followed the rupture of the cyst; and referred to certain cases reported some time since by Dr. Channing. With regard to the treatment by the injection of the tincture of iodine, he remarked that this is now undergoing a trial in England; that while in some cases it had been attended with success, in others no benefit followed. In a few cases, the peculiar effects of the iodine had been observed, but these had been recovered from in a few days. In reference to the usual mode of tapping, he said that where this is done, death is pretty sure to follow, sooner or later, in most cases. He had tried tapping and allowed the canula to remain, recently, in two cases (see *Boston Med. and Surg. Journal*, Vol. LV., p. 409,) in neither of which were there any very..

unpleasant symptoms; in one, none whatever. To the latter operation there seem to be two important objections. 1st, The impossibility of ascertaining beforehand, with certainty, whether the cyst be single or compound, the former being alone likely to be benefited by the operation; there being also the same objection to the operation; by the injection of iodine. 2d, The long and tedious suppurative discharge which the patient is necessarily obliged to undergo. He alluded to several cases of treatment by the canula, which had proved successful in the hands of Dr. Trowbridge. He further stated that he should not hesitate to employ the iodine treatment in cases of a single cyst.

Dr. Gay was evidently opposed to the operation by extirpation, except under favorable circumstances, and said that he had recently performed this operation only at the urgent request of patients.

March 9th.—*Disease of the Brain; Convulsions; Death; Autopsy.*—Case reported by Dr. C. D. Homans, who also showed the specimen. Mr. —, aged 46 years, had always enjoyed good health, though the child of parents both of whom died of consumption. At 16 years of age, he fell and fractured the bones of his nose, the result of which was an inability to breath through that organ afterward. He was a merchant in Calcutta until within a few years, but of late had resided in Boston. During his residence in the East Indies, he had an attack of what was called "sun-stroke," which confined him to the house for some time.

On March 4th, 1856, while sitting at his desk, writing, he had a severe convulsion, from which he recovered in the course of a few hours so as apparently to be as well as ever. He pursued his business, and continued well till March 31st, when he had two fits while at his club, more severe than that of the 4th inst. His struggles were violent, requiring the efforts of several persons to control them. The next day he was out as usual.

April 6th, at the house of a friend he had two convulsions, and was carried home; immediately after which, his mental faculties became disordered; memory of names of persons and things impaired; he imagined himself away from home, in another house, where he could stay but a limited period, &c. For some days he refused to eat, and the urine and feces were discharged involuntarily. He soon, however, took food again regularly, and at the end of about three weeks he had recovered strength sufficiently to walk down stairs, having kept his bed previously. He then appeared insane, and it was necessary always to have a male attendant with him. April 25th he escaped from the house, and bought a country seat at auction, the purchase of real estate being one of the principal subjects his mind seemed to dwell upon. He would sometimes absolutely refuse nourishment, and again soon after take it; the tongue was slightly coated; pulse somewhat accelerated; there was a tendency to ulceration in the mucous membrane of the mouth; the skin was natural save that there was some heat about the head. There was at times long continued constipation.

June 15th.—At this time he appeared much better; he took his meals regularly, and his mind seemed to be tending toward a normal state. He was ordered to abstain entirely from animal food, but otherwise to live as those about him did.

July 4th, he seemed worse; complained of pain in his head, walked unsteadily, reeling backward; mind as bad as ever. Toward the last of



this month he began to amend, and continued slowly to do so through August, so that by the middle of September he appeared to have perfectly recovered.

February 17th, 1857.—Mr. —, the patient, came home with a violent pain in the head, accompanied with drowsiness. He arose the next day as well as usual, and continued so until February 21st, when on awakening he complained of great pain in the head; this pain he always referred to the vertex. He kept his room, and at 5, P. M., had two severe convulsions; at 8, another; and at 5, A. M., Sunday, a fourth. During this day he was well enough to come down stairs, and in the evening sat in his room conversing with an intimate friend. His mind was perfectly clear; he gave directions about his affairs, in case of death, which he anticipated might ensue at any time. At 9½, P. M., he lost his consciousness, and did not regain it.

February 23d, at 2½, A. M., the convulsions recurred, and continued with short intermissions until Friday, at 9, P. M., numbering 170 in this time, according to the report of the watcher. Sometimes they would run into each other, and at other times there would be an interval of five, ten or fifteen minutes. A few times there were longer intervals, after which the attacks were more severe. From 12, Thursday noon, to midnight, there were 70 convulsions. They were general, affecting however, the right arm and leg decidedly more than the left. The left eye was very much injected. After 9, P. M., Friday, the patient had no more convulsions, but lay in a comatose state till Sunday, March 1st, at 6, P. M., when death took place. On Friday morning there was a lucid interval, just long enough for him to recognize and shake hands with his family.

The treatment consisted in the administration of sulphuric ether to control the convulsive attacks; and nourishments and stimulants were employed whenever there was an opportunity for them to be swallowed.

*Autopsy*—Tuesday, March 3d, 41 hours *post mortem*.

The *body* was of medium size, and not at all emaciated; *rigor mortis* well marked. In the *thorax* and *abdomen*, nothing abnormal was noticed.

*Head*.—Nothing remarkable was found in the *brain*, save at the anterior part of the *left hemisphere*, just below where the skull is generally sawed in removing the *calvaria*, an inch and a half above the upper edge of the orbit; here the brain over the surface of one and a half to two inches in diameter, was so clearly adherent to the *dura mater* that the *pia mater* and a thin layer of the cerebral substance were left behind in the removal of the organ. The *dura mater* itself was readily raised from the bone, and no evidence of injury or disease was noticed in the latter.

In the *cortical substance*, which had adhered to the membranes, and extending a short distance into the white matter, were too distinct, round, firm, yellowish-white, somewhat granular-looking masses, the largest half an inch in diameter. They adhered closely to the surrounding substance, which for several lines in every direction was filled with minute yellow points. Portions of the white substance, half an inch below the principal mass, had a peculiar translucent appearance, as if formed of delicate parallel fibres, in the interstices of which serum had been infiltrated.

*Microscopic Examination* by Dr. C. Ellis. In the yellow masses,

nothing was seen but amorphous granular matter, and minute molecules or globules. In the portions around, which contained the yellow points, were many fat globules, while the normal tissue, if it existed, was entirely obscured. In the translucent portions were extremely delicate fibres, some of them parallel, some of them forming an irregular reticulated structure, minute fat globules every where abounding.—*Boston Med. and Surg. Journal.*

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*Dr. S. Willey reports the following Use of Belladonna in arresting secretions of Milk in swollen and painful Breasts:*

ST. PAUL, JANUARY 4TH, 1857.

EDITORS MEDICAL OBSERVER—Upon reading Dr. Goolden's article in my number of the *London Lancet* for October (not August,) I resolved to make early trial of the remedy, and five cases have been furnished me of tumefied and painful breasts, not differing in any essential feature from those reported By Dr. G., in which the free use of extract of belladonna to the areola has acted like a specific in every instance. Once only did assistance seem required—citrate of magnesia having been given where protracted constipation obtained. Notes of the cases were kept without the remotest idea of publication, until I saw the article copied into the *Observer* for December. I hand you two extracts from my note book.

Mrs. B. aged 18, child aged 11 months, commenced menstruating regularly five months after birth of child, catamenia not occurring on 12th Nov. when expected, together with the appearance of an obstinate diarrhea in the child, induced weaning, which was soon followed by distended and painful breasts. Ordered that the breasts should be well drawn and an ointment composed of ext. belladonna and simple cerate, two-thirds of the former to one of the latter to be rubbed upon the nipples and areola every two hours. Three hours subsequently, found breasts flaccid and free from pain, much to the expressed wonder of the lady, and the concealed surprise of myself. No re-filling.

Mrs. P. aged 21, having lost second child aged seven months, suddenly suffered with red, turgid and throbbing breasts, pain much aggravated by riding to the cemetery, two miles distant, temperature 12° F. below zero. The application of belladonna to the entire breasts was made in this case and complete relief was obtained in six hours. Extreme dilatation of the pupils with strabismus, was produced, which passed away soon after the administration of paragoric in hot brandy sling. This was the only case where other than the nipples and areola were anointed.—*Cin. Med. Obs.*

## EDITORIAL AND MISCELLANEOUS.

## ATLANTA MEDICAL COLLEGE.

Without going into all the facts and circumstances connected with the relations which have existed between the Atlanta Medical College and the Medical Department of the University of Nashville, but rather incidentally in reference to the course of those controlling that department, we remarked in the March number of this Journal, that in our opinion, they had pursued an illiberal and ungenerous course, and had manifested an arrogant and selfish spirit, and though we talked thus plainly, as it was our purpose to do (feeling that self-respect and a proper regard for our rights not only justified, but required it,) we intimated a disposition to indulge a forgiving spirit, and even signified our willingness to admit of the Nashville School, all they have been claiming for themselves in the modest, elegant and pious style of "before God and the Saints, the University of Nashville had, *by far*, a larger class of bona fide paying students than any College, outside of Philadelphia, in the United States."

Our opinion of the controlling influence in the Nashville School being such as we have stated, we felt that the pursuit of an open and manly course made it proper for us to make the declaration, that we were not dependent upon the countenance and favor of that Institution, which had been so constantly and industriously held up, by the enemies of this school, as the insuperable obstacle in the way of our success.

The opinion entertained and expressed in reference to the Nashville School, has not been altered by the elaborate and offensive article contained in the last number of the Nashville Journal, doubtless designed as the opening gun to what they intend as the destructive fire which is to be poured upon us at the approaching meeting of the American Medical Association.

We have no taste for controversy, and have not "tossed the glove defiantly," or otherwise; but have thought proper to state openly and candidly what our impressions have been in reference to the conduct and bearing of the Nashville Faculty, under the influence of a spirit, as we believe, whose motto is, "rule or ruin," and while we have at last had an open declaration of that war which we know to have been carried on against us, in a different manner, we here state, that it is our determination to be just to the Nashville School, without regard to the course she may think proper to pursue.

In proof of our disposition to accord full justice to the Nashville School, we intimated in the very article which has been made the occasion of the recent attack upon us, that it was possible, that she might realize the height of her apparent ambition, in becoming "the leading School (so far, at least, as the number of students in attendance can make it so) in the United States;" and stated distinctly, that "we had no objection to the high destiny which seemed to await the University of Nashville," and, in addition, that "it was an Institution, taken altogether, to which we looked with pride and pleasure;" in justification of which statements, we will adopt the language of the Nashville Journal, that "there is nothing inconsistent in admiring a man, without endorsing all his habits." It is true, that the Nashville Journal states that they have not been ungenerous to the Atlanta Medical College, and that they have not manifested an arrogant and selfish spirit; and in proof of which, present the fact, that *so far* from the College of Nashville complaining because the Atlanta Medical College chose to hold her sessions in the summer,\* "*that with the full permission of all his colleagues, whom he consulted, a Professor here (there) assisted Atlanta in her first course,*" and asks the question, "was this ungenerous?"

In response to this direct enquiry, we admit the fact, that *Professor Buchanan was allowed by the Nashville Faculty to be a party to the establishment of the Atlanta Medical College*, and thus committed themselves to the acknowledgment, that the Institution was based upon principles equally high and honorable with their own, which we state to be the fact, and can abundantly sustain.

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\* Italics are ours.

In addition to this, we state the fact, that Professor Buchanan was regularly elected, by the Board of Trustees, to the Chair of Anatomy, and early in the course, his name was *published* as holding that relation ; and farther, that every member of the Board of Trustees, and the Faculty, considered him a Professor, fully entitled to all the privileges connected with that position, and expected him to discharge all the duties connected with that office ; that Professor Buchanan considered himself as occupying this relation to the Atlanta Medical College, with the full permission of his colleagues, and as being under obligations to do all that any other member of the faculty was expected to perform, even to the signing of the diplomas, is clear and unquestionable, and will be fully admitted by him.

"So far," the Nashville School have not been ungenerous or illiberal ; "so far" from this, a tender and fostering care had been exercised over the welfare of the little bantling (or "little sister," as they are pleased to term it,) and we are not certain that some did not even suppose that they intended it as a sort of *appendage* to the Nashville School, so remarkable, we may say, unprecedented, had been the generosity, and almost *parental* regard manifested by that Institution. But, to proceed : a large class assembled, and we will merely suggest the *possibility* (in the absence of any other sufficient explanation) that the idea of *competition* may have originated in some *visionary's* brain, (it could not have arisen elsewhere,) and have been whispered in the ear of Nashville, (at least, they intimate in the article alluded to, that we thought they were jealous, and as we have made no such charge, the fair inference is, that they have *suspected* themselves of entertaining such a feeling,) after which, whether, as a result or not, we will leave others to determine, we hear mutterings of disaffection, and then a protest against the propriety of the publication, made long before, of Professor Buchanan's name as Professor of Anatomy, accompanied with an order directed to him to sever his connection with the Atlanta Medical College, under penalty, upon refusal, of losing his position in Nashville.

Fortunately, for Professor Buchanan, (upon whom we are not disposed to cast any censure in that matter, having rendered us efficient service, and, at all times, endorsed in the fullest manner, the correctness of the principles upon which

the Institution was established,) the Secretary of the Board of Trustees had neglected to notify him of his election to the Chair of Anatomy, and formally ask his acceptance, and thus he was permitted to escape from the most unenviable position in which he had been placed by his colleagues.

What was the respective influence of each member of the faculty of Nashville, in the adoption of the course, with which we have dealt so mildly, in characterizing it as illiberal and ungenerous, we do not pretend to know; we can only say, that the impression, at that time, was, and still exists, that personal considerations upon the part of the individual who is understood to have the controlling influence in the Nashville School, and who was known to be inimical to Professor Buchanan, had largely shared: let this be as it may, without going into further detail, we ask the question, if the facts here presented imposed a debt of gratitude, as intimated, upon the Atlanta Medical College towards the Medical Department of the University of Nashville; or, upon the other hand, are we not fully sustained in the opinion which we have thought proper to express of the course pursued toward us?

“But, Atlanta chose to take the initiative in another untried direction:” to this, we reply, that it does not accord with the facts of history, as the University of Virginia, many years since, established the principle of allowing students to come forward for graduation, without *any* interval in the course of instruction; and this Institution, with not more than three or four, certainly not a full corps of Professors, has been fully recognized by the highest Colleges in the land; and was even commended for making *attainments*, not *time*, a test of the qualifications of the candidate for a degree, by a Medical Journal, of which the great Drake was one of the Editors. We contend, that our regulations, even in regard to the length of *time* which a student shall occupy in the study of medicine, before becoming a candidate for graduation, are the same with Nashville, and *challenge* them to the proof, that we do not adhere as strictly to the requisition as *themselves*.

While we hesitate not to say, that we are not of those who are constantly heralding forth the inferiority of the American Medical profession, we freely admit, that there are defects in the system of medical education, and have long since an-

nounced ourselves as prepared to confer upon this subject, and to aid in elevating the standard of professional qualification; we say *confer*, and mean to be understood. We intend that those who control the Nashville School shall understand that our claim to a voice in the regulation of medical matters in this country is equal to their own, either as derived from State Sovereignty, or according to the terms of admission into the American Medical Association, with which they have seen fit to threaten us, in reference to their successful control of which, they seem to have forgotten, there may be some doubt; though it is true, that it would seem to be a pity, that there should have been so large an expenditure of time and money, both last year and this, upon the part of our *regulators*, if they should not accomplish our ruin through the instrumentality of this body. That the American Medical Association has no control over this subject, and that, in the very nature of things, it is an *absurdity* to contend for the power of this body to regulate medical education, can be and will be clearly demonstrated, upon the proper occasion; besides this, the rights and interests of all, who are, by their own regulations, entitled to representation in that body, must be respected, even within the limits of their own legitimate sphere of action, and therefore we contend that they have no right to *legislate out* of their body those already belonging to it, or entitled to representation in it—that “the Association is not a law making power for the profession at large,” is too plain to admit of question, and “having a code of ethics for the government of *its members*, all the power it has is to cut them off from membership for non-conformity to its code. This it has done, and this, we trust, it will always do, whenever occasion requires.”\* Having laid down their code of ethics—the adoption of which and conformity to which, entitles all its members to equal rights and privileges in that body—any new exactions not specified in that code would be *ex post facto* in their claims and entitled to no respect.

In reference to the last point, which we propose to notice at this time, in the article contained in the organ of the Nash-

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\* S. W. Butler, M. D., Editor of New Jersey Med. and Surg. Reporter, and Chairman of Standing Committee of American Medical Association on Medical Education.

ville School, we have to say, that it seems to be a little remarkable, without having, as they state, *asked any one*, they should be able to speak so confidently as to our standing with other institutions; in reference to that statement, we must be permitted to say, that it is calculated to convey a *false impression*, in regard to the University of Pennsylvania, the only one of the three Colleges mentioned, with whose position we have made ourselves acquainted, our special interest in reference to the relation we sustained to that institution, having very naturally arisen from the fact that it was our Alma Mater.

What the position of the Nashville School is in regard to the Atlanta Medical College, we do not know, as she has never given it officially, so far, at least, as our information extends, but if it is intended, by the statement in the Nashville Journal, to convey the impression (which seems to be the object,) that the *degree* of this College is not recognized as *equal* to their own, then we say, that the assertion, that they stand in precisely the same relation to us, with that of the University of Pennsylvania, is not in accordance with the testimony, and which we stand prepared to prove whenever it is questioned.

In addition, we do not hesitate to say that the statement of the Nashville Organ, that "they are doing precisely what the first Colleges in the United States are doing," is not in accordance with the facts, if it is intended to mean, that the first Colleges in the United States do not *fully recognize* the Atlanta College, and put her upon the same footing with the Medical Department of the University of Nashville, in proof of which, we present the fact, that the *leading* School of the Union, the Jefferson Medical College, of Philadelphia, has, in the most satisfactory and unequivocal manner, time and again, acknowledged the Atlanta Medical College to the fullest extent that we could possibly desire—that the *leading* school in our own State, and certainly *one* of the first Colleges in the United States—the Medical College of Georgia—has admitted our claims as fully equal to her own, and stands most intimately connected with, and committed to her policy, as equally high and honorable with her own—that the Medical College of the State of South Carolina, in Charleston, a long established and most successful Institution, and maintaining a high standard



of qualification for graduation, even in these lax days, and located in the very land of honor, does not fail in the most decided manner, to extend to us the cordial grasp of full recognition, and without going into farther detail, we would remark, that if any student of medicine has ever been refused permission to become a candidate for graduation in *any* College of the United States, after attending but a *single* course of lectures, and that in the Atlanta Medical College, we are yet to hear the statement. But without adding more to an exposition of facts, which we have been compelled to make in defending ourselves from the unjust attack, which has been made upon us by the Nashville School, just time enough for general circulation before the opening of the next course of Lectures, and just upon the eve of the meeting of a medical body, with which they have sought to injure us; and hold up in terror before us—but as it was supposed, not time enough to allow a reply through a regular medium, we take leave, for the present, of the Nashville Organ, with the endorsement of its remark, that “there is no accounting for taste,” as will be clearly demonstrated upon some future occasion, if necessary, from the refined and elevated effusions of a “Western Editor.”

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#### “THE LITTLE SISTER.”

In reading, a few days since, the Nashville Journal, I was rather struck with the editorial devoted to the “Little Sister,” down here in Atlanta; and the impression made on my mind was, that our matronly sister up there had begun to experience something of the same feeling that one of old Father Jacob’s wives had for the other.

While this Sister *was* a *little Sister*, Nashville was very clever and courteous—sent down one of her Faculty to help her into life. But as she grew into womanhood and began to have admirers, “the green-eyed monster” begins to whisper *rivalry*, then comes a change in the views of the Doctors in the Capital of Tennessee.

The “little Sister” is now the mother of children, and bids fair to have a pretty numerous progeny, and to Nashville. *mirabile dictu!* a good many ugly marks become apparent.

The tone of the article referred to, is to my mind rather two-sided; it seems to be very friendly, yea, rather affectionate, yet it must be distinctly understood, that they regard it a terrible concern—an unprecedented innovation. We might say, in the language of Holy Writ, "Have no fellowship with the unfruitful works of darkness." If this Atlanta girl is so naughty, why this warm friendship. A short chapter on *consistency* might be read with benefit.

But let us look at these ugly marks on our little sister, that excite Nashville to such dolorous effervescing. What is the most serious defect? After all the wailing, there appears but one failing—she brings her children too soon; if she did not do that, Nashville could always hope to be up to her; but as it is, better kill her off, lest Tennessee might suffer. Good policy; keep a sharp lookout, and Nashville may discover a spot on some of the other Sisters; and if she could only keep up the slaughter, the peculiar propensity of this Sister might be fully gratified. Strange indeed the effect of lime-stone water!!

Mr. Editor, pray whisper it in the ear of Nashville, *that it is late in the day* for a question of *TIME* for *graduation* to be raised in *our* Medical Schools. This is a practical age, and we must look at things as *they are* and not as they might be.

How much time does Atlanta dock from the usual course? None, I answer. But Nashville says, *six months*. Wonderful!! A Doctor is made down in Atlanta *six whole* months before Nashville gets a chance at him. Well, that's very bad, certainly, for Nashville; but whether any body else is hurt by the operation, it doth not yet appear.

What is the *RULE* advertised by all our Colleges, as to the *TIME* of study? *THREE YEARS*. That's the law—a very good one. I wonder if Nashville has observed it. She professes to require the full time, so she publishes to the world. Now did one of her professors ever ask a student if he had rounded out the three year's study? We can refer her to some of her graduates who lacked not *six months*, but *three times* six months. Nor is Nashville singular in this; in every College that I am acquainted with, they put them through on the *shortest* possible notice, and with very little ceremony. A *clum* of mine shouldered a sheep-skin at the end of fourteen months, from the most noted college in the United States. And I am a compe-

tent witness to the fact, that he read as little as any mortal man could well manage to read in the short space allowed him. If ever he read a book clear through, his best friends were never able to tell what book it was. Nor is this an isolated case. Every physician knows that the question of *time*, with Medical Colleges in this country has ceased to be mooted, if ever it was. So let those who live in glass houses be careful how they pitch rocks about.

I am in no way connected with the Atlanta Medical College, and never expect to be, but as a medical man, I wish to see justice done her. She has fought her way through difficulties, which would have proved invincible to any but the most energetic and enterprising of the profession; and now that these indefatigable medical soldiers have accomplished their object, and planted a successful College, which is indeed an ornament to the State and to the profession, I would see them rewarded by the approbation of their professional brethren. They richly deserve it. I know the Faculty to be composed of men of science, character and talent. They have been particular in their examinations, and the Alumni of this Institution will show that the standard of medical education has not been lowered by this School. Until this can be shown, the cry of a Summer School is not in order. It is what we need; what the South ought to have.


If the question of *time* is raised, let the College without sin cast the first stone: if so, not many rocks will fall on Atlanta's head.

MEDICUS.

[A Medical friend has furnished us the foregoing communication, which, for sufficient reasons, at his request, is published without his name attached, and in this connection, we would commend to the Nashville School, Esop's account of the "Crab and her mother."

Said an old Crab to a young one "Why do you walk so crooked child? walk straight!" "Mother," said the young Crab, "show me the way, will you? and when I see you taking a straight course, I will try and follow."]

EDITOR.

 We wish it distinctly understood, that the apparently controversial character of this number of our Journal, is entirely the result of a conviction, upon our part, that a regularly concocted plan has been formed for our injury: this we state, as our belief, from what we consider almost positive testimony, and though, what we have said, is certainly defensive, it would not have been said, but for the belief that "forbearance had ceased to be a virtue."

Our efforts in the cause of medical science, though feeble, have proceeded from an honest desire to advance it in every particular, and in reference to the subject of medical education, we have long since announced ourselves as ready to come up to the aid of the profession in the elevation of the standard, and not having violated any principle, we have not felt it to be our duty to submit in silence to the unjust aspersions which have been cast upon us.

In reference to this subject, more than a year since, in the March number of this Journal, for 1856, we held the following language, which we now repeat:

"The projectors of this enterprise are not under the influence of any such selfish and contracted view, as to have for their object, merely to build up a patronage, and to vie with rival schools for *numbers*, but with a comprehensive sense of the obligations resting upon them, as the representatives of a science, devoted to the elucidation of the most important truths connected with our temporal existence, are laboring to lay a broad and solid foundation, with an enduring superstructure, that will, in a higher and more important sense, compete successfully with the first institutions in the land; and if there are any individuals or institutions belonging to the profession, whose course indicates, that in their estimation, "they are the people, and wisdom will die with them"—and who are setting themselves up as the general regulators of medical affairs, and are disposed to dictate what we shall, or shall not, do, we would say to them, that while we are perfectly satisfied with our position, (and the ample recognition of our claims, upon the part of other medical colleges,) as being fully endowed with rights and powers, fully equal to those emanating from any government in this or any other country, and therefore, if preferred, perfectly independent of any *self-constituted* tribunal whatever, we still choose to place ourselves upon the same platform with the other representatives of true and regular medicine, and wish it to be distinctly understood, that our intention is to have a

standard not inferior, in any particular, to that which shall be adopted and sustained by the voice and action of the profession, and in whatever matter, reform or improvement, may be demanded, we shall be prepared to come up to the full requisition, and shall, at all times be found as active and zealous coöperators for the more thorough education of medical men—whether it be by more rigid requirements in reference to preliminary education, a higher standard to regulate examinations, the separation of the teaching and licensing power, or a prolonged term of study; and in reference to the latter, we do not mean those catchpenny and pseudo extensions of terms, denominated preliminary lectures, whose object is now too well understood to make it necessary to do more than barely allude to them, but a *bona fide* establishment of some uniform increase in the time of study and attendance upon lectures, before an individual shall be allowed to become a candidate for the degree."

We earnestly hope that this will be the end of it, and that we may be permitted to go on in peace, and be tested by our merits; but let the consequences be what they may, we shall continue to speak the truth without fear.

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#### "CIRCULAR OF SAVANNAH MEDICAL COLLEGE."

A friend has placed upon our table, at a late hour before closing up the editorial matter for this Journal, the circular of the Savannah Medical College, which reports, after a number of years, twenty-five students in attendance during the last course of lectures, and announces itself authoritatively and uncompromisingly opposed to teaching medicine in the summer, and with *nothing to lose*, comes up to the help of the Nashville School, hoping, by possibility, something *may be gained* for themselves in the contest.

We think this whole *scheme* is understood by us, and though most signally defeated in the accomplishment of what was intended as the initiatory step in this *combined* movement at the late meeting of the Medical Society of the State of Georgia, they yet hope to secure the accomplishment of their object, through what is supposed to be the all controlling influence of those to whom we have good reason to believe, they are committed.

But we have already bestowed more attention upon this cir-

cular than we had intended, for indeed, our principal feeling in the matter has been a rather excessive amusement, and as we are in the way of using Esop, we will quote him again, as more appropriate to the subject than any thing that we could possibly conceive—"A gnat that had been buzzing about the head of a bull, at length settling himself down upon his horn, begged his pardon for incommoding him; but if," says he, "my weight at all inconveniences you, pray say so, and I will be off in a moment." "Oh, never trouble your head about that," says the bull, "for 'tis all one to me, whether you go or stay; and to say the truth, I did not know you were there."

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*Proceedings of the Annual Meeting of the Medical Society of the State of Georgia, held in Augusta, April 8th and 9th, 1857.*

The Society assembled at 10½ o'clock, in the Presbyterian Reading Room, and was called to order by the 2d Vice President, Dr. S. W. Burney, of Forsyth. The Recording Secretary being absent, Dr. Eben Hillyer, of Atlanta, was requested to act as Secretary *pro tem*.

The following members were present :

Richard D. Arnold, of Savannah; Jo's. A. Eve, of Augusta; Lewis D. Ford, of Augusta; M. H. Oliver, of Atlanta; R. Q. Dickinson, of Albany; W. L. Jones, of Augusta; J. G. Howard, of Savannah; L. A. Dugas, of Augusta; Henry F. Campbell, of Augusta; R. C. Beack, of Augusta; Eben Hillyer, of Atlanta; J. M. Turner, of Augusta; A Means, of Oxford; S. W. Burney, of Forsyth.

The proceedings of the last Annual Meeting held in Macon, April 9th, 1856, were read and approved.

On motion, the Rules were suspended, and the following gentlemen, on written application, were duly elected members of the Society:

Prof. Joseph P. Logan, of Atlanta; Prof. Jesse Boring, of LaGrange; Prof. John W. Jones, of Atlanta; Wm. S. Meiere, of Madison; John B. Hendrick, of Covington; G. L. McCleskey, of Madison; N. F. Powers, of Thompson; V. H. Taliaferro, of Atlanta; Olin S. Means, Oxford; T. C. H. Wilson, of Atlanta; E. J. Roach, of Pulaski; W. H. Doughty, of Augusta; W. L. Felder, of Augusta; W. T. Grant, of Columbia; R. H. Eaton, of Lawrenceville; M. J. Jones, of Warrington; A. T. Jenkins, of Green Co.; J. W. Gardner, of Augusta; J.

T. Dickinson, of Albany; S. S. Cranford, of Augusta; T. B. Ford, of Augusta; DeSaussure Ford, of Augusta; H. R. Casey, of Columbia; J. C. Carroll, of Lawrence Co.; E. B. Hook, of Augusta; E. H. W. Hunter, of Louisville; D. W. Marks, of Augusta; D. W. Young, of Augusta; H. H. Steiner, of Augusta.

The election of officers being next in order, a ballot was ordered, and the following gentlemen were duly elected for the ensuing year:

Dr. S. W. BURNET, of Forsyth, President; Dr. H. F. CAMPBELL, of Augusta, 1st Vice President; Dr. T. C. H. WILSON, of Atlanta, 2d Vice President.

On motion of Dr. Arnold of Savannah, the Corresponding and Recording Secretary, and Treasurer, were consolidated. A ballot was then ordered, and Dr. Eben Hillyer, of Atlanta, was declared unanimously elected.

The selection of Delegates to the American Medical Association being next in order, a committee of five, consisting of the following gentlemen—Drs. Dickinson, Dugas, Arnold, Taliaferro and Means,—were appointed by the President, to select them, and report at their earliest convenience.

Society then adjourned until three o'clock, P. M.

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#### AFTERNOON SESSION.

Society called to order by the President. Reports from auxiliary societies being called for, Dr. E. Hillyer presented a report of the organization of officers and members of the auxiliary society in the City of Atlanta; which, upon motion, was received and adopted, and ordered to be put among the records of the Society.

The committee to appoint delegates to the American Medical Association, reported the names of the following gentlemen:

Dr. W. S. Meiere, of Madison; Dr. J. G. Howard, of Savannah; Dr. Jesse Boring, of La Grange; Dr. Joseph P. Logan, of Atlanta; Dr. Wm. S. Jones, of Augusta; Dr. Geo. F. Cooper, of Americus; Dr. N. F. Powers, of Thompson; Dr. Eben Hillyer, of Atlanta; Dr. T. S. Powell, of Sparta; Dr. R. D. Arnold, of Savannah; Dr. H. R. Casey, of Apling; Dr. Henry Gaither, of Oxford; Dr. S. W. Burnet, of Forsyth.

The committee also reported the following:

*Resolved*, That should any of the gentlemen appointed be unable to attend, that they be authorized to appoint their own alternate.

The report was received and unanimously adopted.

The reading of Essays being next in order, Dr. Kollock, of

Savannah, read a very elaborate and interesting paper upon Vesico Vaginal Fistula.

Society then adjourned until 10 o'clock, Thursday morning.

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THURSDAY MORNING, APRIL 9TH.

Society met pursuant to adjournment.

Minutes read and approved.

Upon written applications, the following gentlemen were elected members: Drs. W. T. Hollingsworth, of Morgan; J. W. Dent, S. W. Lamar, C. Walton, Charles Palmedo, of Augusta, and Thos. S. Powell, of Sparta.

On motion of Dr. Means, it was

*Resolved*, That those gentlemen of the Society who were appointed to read Essays at the present meeting, and may have prepared them, but who have been unavoidably prevented from attending, be requested to furnish their papers at their earliest convenience, to the Editor of the Southern Medical and Surgical Journal, for publication.

On motion, for the benefit of new members, the Secretary was required to read the Constitution and its amendments; also that the Editor of the Southern Medical and Surgical Journal be requested to publish the same in the columns of said Journal.

Dr. Jos. A. Eve, by appointment, read a paper upon the diseases of the Cervix Uteri, which was listened to with much interest by the Society.

Dr. L. A. Dugas contributed a full and interesting paper upon Fractures of the Scapula.

Dr. Dickinson, of Albany, offered the following, which was adopted:

*Resolved*, That the thanks of the Society be tendered Drs. Kollock, Eve and Dugas for the Essays read by them before the Society, and that they be requested to furnish copies for publication in the Southern Medical and Surgical Journal.

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AFTERNOON SESSION.

Society called to order by the President. Dr. Hunter offered the following:

*Resolved*, That O. S. Proffett having been found to have been ineligible at the time of his election to membership in this Society, the Secretary is hereby instructed to erase his name from the list of members, which was unanimously adopted.

A Committee consisting of Drs. Means, Grant, Ford, Jones, and Campbell, were appointed to select subjects, and appoint Essayists for the next Annual Meeting.

The selection of the place for holding the next Annual



Meeting being now in order, a ballot was ordered, and upon counting the votes, it was found that Madison, Morgan County had received a majority. Dr. Thos. S. Powell, of Sparta, was elected Orator for the next annual meeting, and W. S. Meiere, of Madison, his alternate, should he be unable to attend. The Committee on Essays made the following report of subjects and Essayists for the next meeting, which was received and adopted:—Dr. J. G. Howard, of Savannah, on Uterine Diseases; Dr. E. J. Roach, of Pulaski, on the Propriety of Surgical Operations about the Joints; Dr. H. F. Campbell, of Augusta, on the Rectal Administration of Medicines; Dr. J. M. Green, on the Value of Escharotics in the Treatment of Cancer; Dr. R. D. Arnold, of Savannah, on the Pathology and Treatment of Yellow Fever; Dr. Ira E. Dupree, of Twiggs, on the Treatment of Prolapsus Uteri; Dr. Eben Hillyer, of Atlanta, on the Physiology of Menstruation; Dr. V. H. Taliaferro, of Atlanta, on Obstetrical Surgery; Dr. N. F. Powers, of Thompson, on Diseases of the Skin; Dr. Meiere, of Madison, on the Use of Alcohol in Typhoid Fever; Dr. R. Campbell, of Augusta, on Wounds of the Abdomen; Dr. J. P. Garvin, of Augusta, on Nervous Irritation of the Stomach. Voluntary Communications from any member of the Society are earnestly requested and will be gratefully received.

The following, by Dr. W. T. Grant, was adopted:

*Resolved*, 1st. That the Medical Society of the State of Georgia, return their sincere thanks to the Trustees of the Presbyterian Church, for their kindness in extending the convenience of their lecture room to the Society. 2d. That the thanks of the Society be extended to the profession and the citizens of Augusta for their liberal hospitality and kind reception of the members of the Society.

Dr. Campbell offered the following, which was adopted:

*Resolved*, That the funds of the Society now on hand, as by the report of the late Treasurer, be placed in the hands of the President and Treasurer, to be used in procuring such artistical illustrations as may be deemed necessary for the articles published under the auspices of the Society.

The following gentlemen were appointed on the Committee of Arrangements for the next meeting:

Drs. H. J. Oglesby, E. E. Jones, John B. Cranford, and G. L. McCleskey.

Dr. Hunter offered the following:

*Resolved*, That thanks of this Society be tendered the President and Secretary for the faithful manner in which they have discharged their respective duties.

The following by Dr. Arnold, which was adopted:

*Resolved*, That the thanks of the Society be tendered to the press of the city for the courtesy extended to it as a body.

A motion was passed instructing the Secretary to have published the resolutions of thanks to the Trustees of the Presbyterian Church, the Physicians, citizens, and press of Augusta, in the Augusta papers.

Dr. Grant offered the following:

*Resolved*, That this Society do now adjourn until the second Wednesday in April, 1858, to reassemble in the town of Madison, Morgan County, Georgia.

EBEN HILLYER, M. D., *Secretary*.

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### PROFESSOR CAMPBELL'S CLAIM.

We find in the last number of the Southern Medical and Surgical Journal, of Augusta, Ga., a claim of priority in the discovery of, and also the *naming* of the excito-secretory system of nerves, by Henry Fraser Campbell, M. D., of Augusta, Ga., U. S. A., member of the American Medical Association, Professor of Comparative Anatomy, &c., in the Medical College of Georgia, and senior Editor of the Southern Medical and Surgical Journal, in the form of a letter to Dr. Marshall Hall, of London, who has announced in the London Lancet, for March 1857, a system of excito-secretory nerves, as a discovery of his own, which Dr. Campbell contends was developed, and named by himself in 1850 and 1853. We regret that, on account of incessant engagements, we have not been able to give Dr. Campbell's paper the attention which we understand it deserves; we hope, however, to recur to the subject at some future time. Dr. Campbell has a high reputation for science and gentlemanly bearing, and would hardly undertake to establish a claim which was not well founded.

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*Obstetrical Memoranda. Reported by the Editor of the N. J. Medical and Surgical Reporter.*

At the January meeting of the District Medical Society for the County of Burlington, N. J., a rambling conversation occurred, in which some remarks were made by some of the members which we will endeavor to record as far as our memory will serve us.

*Ergot*.—Dr. Budd remarked that he was now attending a patient to whom he had administered ergot for the purpose of hastening the ter-

mination of a case of labor. He had never given the "confounded stuff" without regretting it afterwards. In this case the time and circumstances favored the use of the drug in an eminent degree. The os uteri was fully dilated, the presentation was natural, and nothing seemed wanting but an increase of uterine pains, which seemed to be very sluggish. Although fully borne out by the experience of others, yet, with his own former experience before his eyes, Dr. B. administered the ergot with some hesitancy, but with the desired effect of inducing uterine action. This was characteristic of the action of ergot, being persistent and strong; and there was nothing at the time that was unpleasant in the action of the drug. The labor terminated speedily and satisfactorily, but was followed by metritis, which Dr. B. feared was to be attributed to the persistent uterine action caused by the ergot. In case of the death of the patient, who was still very ill, the contemplation was to him by no means pleasant.

Dr. Gauntt understood Dr. Budd to say that some one had given the patient "No. 6" to "help the pains." He recommended Dr. B. to give the credit of the merits to the stimulating action of this medicine. Dr. G. placed great reliance on ergot, and had frequently used it with the greatest satisfaction. He often used it where others employed the forceps, and thought it preferable in most cases except primiparæ.

Dr. Coleman would be sorry to have a bad name given to ergot, for he often found it very useful, particularly, however, in cases of uterine hemorrhage. He had also used it with satisfaction, though he was understood to say that he did not use it habitually, in cases of labor.

Dr. Budd did not wish to be understood to condemn the use of the drug altogether, but it had been his experience never to use it in a case of labor without regretting it on account of its after effects. He often had recourse to warm drinks, as a cup of warm table tea, and found them to be of very great benefit in relaxing the system, inducing perspiration, and an increase flow of the vaginal secretions. Other members corroborated Dr. Budd's experience in this respect.

Dr. Stratton would not claim for rye any of the emmenagogue effects belonging to the ergot, yet he was in the habit of using rye tea, drank warm, and found it to answer a very good purpose; and his patients often attributed great virtue to it. In many cases, it is necessary to be "doing something," be it ever so simple, in order to engage the attention of the patient, and support her flagging energies. Rye tea can do no harm, and he is not prepared to say that it does not do positive good.

Dr. Gauntt was in the habit of exhibiting ergot in combination with opium.

Dr. Stratton suggested whether the physiological action of the two drugs was not incompatible; whether the opium would not interfere with the characteristic effect of the ergot.

Dr. Coleman thought not. He suggested that while the ergot acted on the organic nervous centres, the opium affected the nerves of sensation principally; instancing the action of chloroform, which, while it deadens sensibility, does not interfere with the expulsive action of the uterus.

*Exhibiting Uterine Pains by Titillation.*—Dr. Butler mentioned that he had observed some time since, in a British review of an American work on Obstetrics (by Prof. Miller, of Louisville,) that the writer seemed disposed to ridicule the assertion by Prof. Miller, that uterine pains might be excited by introducing the finger within the margin of the os

uteri, and passing it gently around, and by using slight traction. Dr. B. mentioned a case which recently came under his observation strongly confirmatory of Dr. Miller's suggestion. He was called to attend a woman aged about thirty-five, in her first confinement. There were two or three points of interest in the case. First, the case, although a first labor, was complicated by an extraordinary obliquity of the os uteri. It was so high on the sacrum that it was only with the greatest difficulty that it could be reached by the finger. The pains were frequent and violent, but almost entirely insufficient, from the fact that their force was expended on the anterior wall of the uterus, instead of against the os uteri. It was several hours before the os approached its normal position, in which effort he endeavored to aid nature by placing the woman on her back, by pressure on the anterior portion of the uterus, and by gentle traction on the os. In all his manipulations in this case, Dr. B. had to contend with violent, uterine pains, which were often excited by even the slightest contact of the finger with the os. As soon as there was sufficient dilatation of the os, attempt was made to introduce the forceps, which was only accomplished by the most patient and persevering manipulation, on account of the extraordinary susceptibility of the os; and still more difficult was it to lock them after they were introduced, from the same cause. Pain followed the contact of the finger or blade of the forceps with the os in this case so uniformly, that the patient begged him again and again not to "make a pain" until she felt stronger.

Dr. B. remarked incidentally, that after the forceps were properly locked on the head of the child, he never had a case which required the application of such powerful extractive force to effect delivery. To his mind it was a case that demonstrated the great value of the forceps.

Dr. B. had uniformly been in the habit of exciting pains by titillation, and he could not understand what spirit could have dictated the criticism referred to at the commencement of his remarks.

Dr. Stratton, and several other members, said that they were in the habit of resorting to the same means to excite uterine contraction.

Dr. Coleman said that it was well known that titillation of other sphincters and outlets of the body was followed by muscular action, and he could not see why the rule should not hold good in this instance. Titillation of the nostril excited sneezing; that of the fauces produced it of the stomach, causing vomiting; the passage of a sound or catheter through the urethra often excited the action of the bladder; and the same often held true in the case of the sphincter ani. The doctrine certainly has the support of analogy, to say nothing of experience.

*Labor retarded by an Exostosis; Laceration of Scalp.*—Dr. Cook mentioned a case of labor that came under his observation, in which he met a novel obstruction in what appeared to be an exostosis springing from one of the rami of the pubis. Delivery was accomplished with great difficulty, and not without an extensive laceration of the scalp of the child.

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From reliable information, we are enabled to say, that the approaching Class in the Atlanta Medical College, will show a large increase upon the last; they have already commenced assembling, though it is about two weeks previous to the commencement of the session.

# A T L A N T A Medical and Surgical Journal.

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## ORIGINAL COMMUNICATIONS.

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### ARTICLE I.

*An Address Introductory to the Third Course of Lectures in the Atlanta Medical College.* By J. BORING, M. D., Professor of Obstetrics, &c., Atlanta, Georgia.

#### GENTLEMEN OF THE CLASS:

MY COLLEAGUES have, in the absence of the appointee, devolved upon me the pleasing duty of tendering you, in their names, and those of the good people of this City, a hearty welcome to the Halls of the "Atlanta Medical College."

Happily, to this hour, no misunderstandings, no heartburnings have arisen between the Students of this College and citizens of the place.

All have alike rejoiced in the almost unparalleled success of the Institution, and mutually striven for the perpetuity of fraternal relations and sentiments.

Those who constituted our first and second classes, returned to their homes, bearing with them the confidence, the kindest feelings and respect, of the whole population of Atlanta, whilst in return, *Atlanta* has not ceased to feel that they are her honored sons—those in whose welfare she is deeply interested.

And, I may be permitted to add, that nothing has transpired thus far, by which the utmost friendship and cordiality of intercourse, between Teachers and Students, have been in the slightest degree interrupted.

To us, these are subjects of pleasant review, whilst at the same time, they inspire the hope that such will mark our future history.

We cherish the fond hope that *one* Medical College at least, will mature to the full stature, and attain to the gravity and dignity of age, free from the unhappy prejudices which so generally attend these institutions.

That you, gentlemen, heartily respond to this sentiment, we doubt not, and in return, we pledge for ourselves and the people, that reciprocity which we have a right to expect.

On the part of the Faculty, allow me in this connection to say, that all we have, and are, are yours. We promise you that nothing promotive of the objects of your attendance here, shall be wanting. For the four months to come, we are yours.

It is cause of deep regret, with both you and ourselves, that we are denied the privilege of the expected Introductory on the present occasion.

The Professor of Surgery was, as you are aware, appointed to this honor, but from an unexpected delay in Europe, found it impracticable to meet the engagement.

While you, gentlemen, feel the *disappointment*, it is *mine* to suffer both the disappointment and embarrassing responsibilities devolved.

Under the stress of circumstances, I have hurriedly cast about me for some appropriate theme, some subject, in the discussion of which, I might hope both to please and instruct.

The custom of "Introductorys" has so long and extensively prevailed, as to have brought under contribution, almost every subject of importance to the Profession, and rendered it next to impossible to present anything new. It has, however, occurred to me, that *one* subject, belonging to Medicine, has failed to receive the attention which its importance demands, and that I cannot render a better service, for the present, than that of its presentation. It is

#### THE USE AND ABUSE OF TOBACCO.

That the subject announced comes fully within the range of Medical investigation is not questioned, and hence without an apology for its introduction, I shall proceed to its investigation.

It will not be inappropriate, and it is hoped, not uninteresting, before noticing the medicinal, and other properties of

Tobacco, to glance briefly at its history, especially since, as is well known, it exercises, well-nigh, universal dominion over the appetites and habits of mankind.

It is, perhaps, generally understood that this singular plant, was first discovered among the natives of Tropical America, and thence was introduced into Europe.

That Europeans saw it first in this Country, and thence transferred it to Portugal, Spain and France, is rendered quite certain; but that it was cultivated in Asia, and possibly other portions of the Earth, long anterior to the discovery of the American Continent, can hardly be doubted.

Humbolt says, "The Tobacco plant has been cultivated from time immemorial, by the natives of Oronoko. It does not appear, however, to have been known to Europeans prior to the discovery of America; though it is not improbable that the Asiatics were acquainted with it long before that time, as Palas, Rumphius, and Laureiro, have supposed. But it is not probable, I think, that the Europeans learned the use of it from the Asiatics, as Ulloa has endeavored to show."—*Humbolt's Personal Narrative*, vol. 5, p. 666.

On the arrival of Columbus, at Cuba, in 1492, he sent a small company of his men in search of a large Province, which was reported by the natives to abound in gold, and as being in the interior of the Island. Disappointed in the object of their search, they were returning to the ship, when they saw the natives going about with firebrands in their hands, and certain dried herbs, which they rolled up in a leaf, and lighting one end, put the other into their mouths, and continued inhaling and puffing out the smoke. A roll of this kind they called tobacco, a name, since transferred to the weed itself."—*Washington Irving's Life and Voyages of Columbus—Abridged Edition*, p. 69.

From this country, it was sent by Hernandes, de'Toledo, into Spain, and Portugal, and thence to France, by Nicot, in 1559–60.

"In 1756, on the return of Sir Francis Drake, with the Colonists from Virginia, the practice of smoking was introduced into England, and being adopted by Sir Walter Raleigh, and other courtiers, soon become common." *Pereiras' Materia Medica and Therapeutics*—vol. 2, p. 332.

Its cultivation and use, except for medicinal purposes, were strongly opposed in England, and in fact throughout the enlightened world.

Books were written against it, and laws prohibiting its use were enacted, but all to no purpose. It spread, as if by the power of magic, over the world, and now wields a more universal sway over mankind than any single article of food or luxury known to commerce.

In the eloquent language of another, "The history of Tobacco forms a curious item in the annals of our race."

Next to intoxicating liquors, there is no substance which has gained such an ascendancy over human taste and appetite as Tobacco. There is no nation on the face of the globe, civilized or savage, where it has not found its way.

Europe, Asia, Africa and America, all are familiar with it. There is no condition of society in which it is not a favorite guest.

You find it in the palace and in the poor-house—in the stately mansion and the humble cottage—in the work-shop and the billiard room; the lonely exile solaces his weary hours with it—the joyous freeman exults in its influence. Philosophy muses under its power.

Poetry is inspired, and hardy labor cheered by tobacco.

Wherever man is found, its influence is felt and acknowledged. The citizen whiffs his perfumed cigar—the poor man smokes his sooty pipe—the sailor chews his delicious quid—the matron rejoices in her pinch of snuff.

On the mountain top and in the lonely valley—on the land and on the broad expanse of ocean—in the dark mines of Pennsylvania, and in the glittering halls of Paris—on the rugged hills of Switzerland, and in the gold bearing valleys of California—amid the snows of the North, and under the burning suns of the Tropics—in battle and peace—in storm and in calm—in wealth and in poverty—in health and in sickness—the king and the subject—the master and the slave—youth, manhood and old age—all, all love the magic power of tobacco."—*Beck*.

This unexampled triumph over mankind, is the more remarkable from the fact, that the uneducated palate abhors the article. Nothing, mineral or vegetable, is so disgusting, so



nauseous and overwhelmingly prostrating. So strong a impressions of a first or second trial, in this upward manhood, that no incentives are sufficient to induce its action until time has obtunded the recollection of its loss, sickness and death-like sweats.

Perhaps, however, the most singular fact, developed in investigation, is, that of all classes, the learned Professor, the most consecrated devotees to the use of tobacco. *Clergy, the Legal and Medical professions are its greatest consumers.*

Having briefly noticed the history of tobacco, it is pertinent to enquire next into its use.

And here the question naturally arises, "Is there any for it?" The inquiry is not, whether it has done most good or harm, but, has it an appropriate place in the list of blessings bestowed upon man? Were I called upon to say whether the world would have been the better without the knowledge of it, I should unhesitatingly answer in the affirmative. This, however, has arisen, not from the article itself, but its abuse by mankind. It has its place, and that place is in the Materia Medica. Here, and here only, God intended the knowledge and application of its extraordinary powers.

It is a potent remedy, a virulent poison, producing effects analogous to those of Digitalis, Veratrum, and Prussic Acid, and should therefore never be given, except by the physician or surgeon, and by them, only in cases of unquestionable necessity. It is a narcotic, sedative, emetic, diuretic, expectorant etc.—See works on Mat. Med.

The analyses of Tobacco have detected among its active principles: "*Nicotin*"; an empyreumatic, volatile oil, and "*Nicotina*," an alkaline substance, all of which are deadly poisons.

Every part of the plant contains these principles, and readily imparts them through almost any conceivable medium.

The fumes, as seen from the pipe and cigar, are largely impregnated with empyreumatic oil, the deposits from which, are exceedingly poisonous. It is said that the Hotentots are aware of this fact, and often use the matter contained in their pipe stems to destroy serpents. Mr. Barrow, witnessed an instance in which this substance was applied to the tongue of a poisonous snake; the reptile stretched itself out, became stiff, and died in an instant.—*Cyclopedia of Practical Medicine.*

I may mention, in this connexion, that instances have occurred, under my observation, in which the juice of Tobacco, spit on the heads or into the mouths of serpents, was followed by similar effects.

On the subject of the "Modus Operandi" of this article, little need be said here. Experiments render it highly probable that its action is directed both to the nervous and circulatory systems, affecting the functions of the brain and heart, to a serious, and even fatal extent, especially, when administered in large doses. But, whatever may be its mode of action, or the obscurity by which it is invested, *one thing* is demonstrable, and that is, that it is an agent of tremendous power, and requires in its administration the utmost skill and precaution of the Medical mind.

As a remedial Agent, Tobacco is seldom employed by the Profession, and is chiefly valuable in cases demanding a powerfully relaxing medicine. Tetanus, Intussusception, Hernia, etc., have been successfully treated under its influence.

It is administered in the form of Decoction, Ointment, and the application of the wet leaves over the region of the Stomach, its effects being readily obtained by any method of exhibition.

Having ascertained the *use* of Tobacco, let us next inquire into the subject of its *abuse*.

Before proceeding with this branch of the discussion, it may not be amiss to explain what is here intended by the use of the term "*abuse*." I mean perversion—misapplication; a wrong appropriation of this, or any other article. Its application to purposes other than those intended by the Great Author of all good.

That every such perversion is an *abuse*, and must in the very nature of things, work mischief, will not be denied. The only question here to be settled is, whether Tobacco, was intended as an article of food or luxury. That it is Medicinal has been seen. That it is nutritious, has, I believe, never been assumed, except by the disgusting Tobacco-Worm, and the Musky Goat. Man, though the largest consumer, never conceives of his quid or cigar, as contributing to his nourishment. All *he* claims for it is, the gratification of an unnatural appetite.

Physiologically, it is impossible that a substance possessing

narcotic and sedative qualities in so high a degree, should be other than as an *exhauster*, and in proportion to the extent its application, destroy the vital energies. So true is this, as so generally understood, of Tobacco, that it is everywhere used and recommended for the prevention and reduction of corpulency.

But, the position assumed by the advocates of the quid *ar* cigar is, that "it is a Luxury." This has generally been conceded by those who have opposed its use, and its condemnation has been sought alone, in what are held to be its *direct evils*. Now this concession is wrong. It is founded in error. Tobacco is *not a luxury*. It is a Medicine, a poison, a destroyer of the normal powers and functions of the animal economy, and thus produces a state of the nervous system, in which *morbid* pleasurable sensation is experienced, but not proper luxurious.

It is a fact of universal experience and observation, that the human palate, in its normal state, loathes and detests the article; the brain becomes dizzy, the heart grows faint and convulsive, and the whole man quails under its potent influence.

The appetite for Tobacco, is a creature of its own morbid action, the gratification of which, is of necessity morbid also, and therefore utterly incompatible with all just ideas of luxury. A diseased action, the result of a diseased, or vitiating cause, cannot be held to be a luxury. The very proposition is an absurdity. As well may the Inebriate talk of the "Luxury" of being drunk, or the Debauchee, of the "Luxury" of his hallucinations in a fit of "delirium tremens." It is a diseased action—nervous derangement, and in fact, strictly speaking, *not a state of life*.

That it has the effect, when habitually used, and the nervous system has become the victim of its power, to soothe and exhilarate, is not here denied; but that *such* an effect is incompatible with *sanity*, and is therefore *not* luxurious, seems to me absolutely certain.

Waiving this view of the subject for the present, let us enquire, whether such exhilaration as that claimed for Tobacco, and on account of which, it is justified as a luxury, is compatible with the physiological laws of man's economy, and may be safely protracted. That all such excitement is morbid,

has been seen, and if morbid, violative of the laws of health, seems inevitable. Let it not be said in reply, that its action is sought, as a remedy, in certain cases, and cannot therefore be morbid. We bleed, and blister, and vomit our patients when sick—we stimulate and we depress the heart and arteries, but no man is so profoundly blind, as to hold that these are *therefore*, in harmony with the healthy or sound state of the patient—they are for the use of the diseased, in the removal of his malady. Who ever thinks of perpetuating these remedies and their effects, for the safety of his patient? And why not? They cured, as has Tobacco, and if its remedial qualities, ascertained in the treatment of disease, constitute its medicinal excitement essential to, or compatible with the laws of health, why not of the others? If, in this case, we plead for the perpetuity of morbid excitement, and its compatibility with the physiological laws of our economy, why not in the cases of analagous remedies, such as alcohol, opium and kindred articles? Where is the intrinsic difference?

Again. If such effects in perpetuity, are in harmony with the physiological laws of our economy, why is it, that in all cases, the exhilaration, *thus* produced, is followed, not only by a corresponding, but *far surpassing* depression, and that the agent employed, must be had in constantly increasing quantities, to keep up the *degree* of excitement? Is it not obvious that the action is morbid—in violation of the laws of health, and just in proportion to its obtunding effects upon the vital energies, the *power* of the exciting cause must be increased to obtain an equal response?

The undeniable physiological truth is, that such agents are productive of *undue action* on the part of all those organs coming within their range of influence, which must inevitably result in their impairment.

But, I shall be told of those who have used Tobacco from early youth to old age, and have developed no evil results. The fact assumed, I doubt, but allowing its correctness for the present, I may point to the drunkard of half a century, in proof that habitual drunkenness is also compatible with health. He has been a drunkard *fifty years*, and although his whole man, *soul, body and spirit*, are *steeped* in alcohol, his iron con-

stitution seems unimpaired. But while he has *lived* a drunkard, who can tell how many, with far less indulgence, *have found a drunkard's grave*? They, perhaps, died unconscious of the fact, that they were slain by alcohol, but *their* ignorance on the subject, operates no mitigation of the startling truth. The habit of drinking intoxicating liquors, often superinduces a state of general bad health, which in the end, develops dyspepsia, paralysis, apoplexy, or some form of chronic disease, by which life is destroyed, the unhappy victim all the while supposing himself to be sinking into the grave, according "to the course of nature."

Startling as the proposition may be, there can be no doubt, that hundreds and thousands of *scber* men, so called, and so believing of themselves, die of alcohol, and though never suspected by others or themselves, fill a drunkard's grave.

So of Tobacco. Multitudes are slain by its insidious invasions, in relation to whom, such a thing never was suspected. They were not directly, and at the instant, poisoned to a fatal extent, but slowly invaded, until the very citadel of life was invested by the insidious influence—the final blow was struck.

That the *habit* of using Tobacco, seems in some sort to educate the system to its influence, is no proof that mischief is not being done. Death may not, probably *will* not *immediately* result from the article itself, but the deadly impressions are going on, and the final results will be fatal. The perpetual dripping of water will wear away the hardest granite. Its impressions may be so slow as to elude the most scrutinizing observations, but at last the *huge rock is swept away*.

The young man may give no visible signs of the innovations upon his health, by this poison, but an early grave, or premature old age, with tremulousness, paralysis of body and mind, and general inervation will finally demonstrate its *fatal potency*.

But Tobacco is an *active*, a *virulent poison*, and therefore positively contra indicated as an article of luxury.

This proposition is sustained by every authority of the Profession.

Wood and Bache, in the United States Dispensatory, say of one of its active principles, "Nicotina," "In its action on the animal system, it is one of the most virulent poisons known.

A drop of it in the state of concentrated solution was sufficient to destroy a dog; and small birds perished at the approach of a tube containing it."—[See article Tobacco, U. S. Dispensatory.]

Professor Dunglison states that, "in large doses, Tobacco is one of the most violent acro-narcotic poisons. When given in the form of decoction, or applied to abraded surfaces it has caused death." *Dunglison's Materia Medica and Therapeutics*, vol. 1, p. 135.

*Pereira*, in describing its effects, says, "The more prominent symptoms are, nausea, vomiting, and in some cases, purging, with extreme weakness and relaxation of the muscles, depression of the vascular system, (manifested by feeble pulse, pale face, cold sweats and tendency to faint,) convulsive movements, followed by paralysis and a kind of torpor, terminating in death. [*Pereira's Materia Medica*, vol. 2, p. 327.]

"In large doses," says Professor Beck, "it is a virulent poison, acting principally upon the brain and heart. It impairs the action of the heart, causing a sense of fluttering, excessive faintness, copious perspiration, sense of alarm, sickness and vomiting, coldness of the skin, feebleness of pulse, convulsions and death. *Beck's Mat. Med.*, p. 340.

The following strong language on this subject, is published in the "Cyclopedia of Practical Medicine," vol. 4, p. 150. "Tobacco is another sedative of great power. The experiments of Sir B. Brodie have rendered it probable that there are two efficient principles in Tobacco: one an empyreumatic, volatile oil, which operates directly on the brain and nerves of sensation, or on the sensibility of the system; the other, a saline substance (nicotiana) which appears to influence, chiefly the motor nerves, confining its sphere of action particularly to the heart, which it renders insensible to its natural stimulus, the blood, and thereby causing death.

In whatever manner this volatile oil is procured, its effects are so powerful on the animal economy, that when it is applied to an abraded surface, or introduced into the system, it causes almost instant death.

Numerous instances are recorded in medical works, in which Tobacco has produced fatal results, by being applied to the scalp, over the region of the stomach, to abraded surfaces,

and in the form of decoction, both in the hands of medical men and under the practice of the domestic circle. So frequent are these occurrences, as to have excited a just apprehension in the mind of every intelligent writer on the subject, and hence the cautions with which their works abound, as to its administration.

I saw an account but a few days since, published in a Texas newspaper, in which it was stated that a little girl, ten or twelve years of age, had come to her death by the use of snuff, in the disgusting practice of "*dipping*."

How strong the infatuation, which adopts as a *luxury*, a poison so deadly and uniform in its effects!

It is not only *poisonous*, but is one of the most virulent, acro-narcotic poisons with which the medical mind is acquainted, standing in this respect, *pre-eminent* in its class.

The melancholly effects of Tobacco, are however, by no means confined to the physical man. As should be expected, from its action on the brain and nervous system, the stomach and process of digestion, and the circulation; seriously affecting the heart and arteries, the intellectual faculties suffer the most disastrous consequences. A moments reflection must satisfy the observing mind, that any cause, the effects of which, so seriously modify the action of these vital organs and functions, will inevitably involve the mental powers. How can the mind continue healthy, and perform its office, when all the organs on which it depends, or with which it is in connexion are diseased? A corrupt fountain cannot send forth a pure stream. *A diseased brain cannot nourish and sustain a sound mind.* As soon may we expect fever without increased action of the heart and arteries. In accordance with these views, it may here be stated, as a well established fact, that *Lunacy* is a frequent result of this habit. The reports of Lunatic Asylums, in the United States, have within the few last years, demonstrated the truth of this statement. Of the unhappy victims to this, heaviest of calamities, an astounding proportion is from the professions, especially the christian ministry.

There are at this moment, several ministers of the Gospel, *demented*, and driven from their high and holy avocations, to confinement in Asylums for the insane, in this country, by the habitual use of tobacco.

A short time since, I saw published in a widely circulating and respectable religious newspaper, an account of the Rev. —, Pastor of the — church, in Virginia, who cut his throat in a fit of insanity, and the attending physicians attributed his insanity to the excessive use of this article. What an end for a Christian minister!

It is a nice question, whether, or how far *self-murder* may be extenuated by insanity, when *that* insanity is the result of a voluntary and needless indulgence. Is it less excusable for a man to kill himself with alcohol or a knife, than with tobacco? Where is the difference? You say, such was not the *intention* in the case of using tobacco. Neither is it the intention of the drunkard or debauchee.

I cannot consent to dismiss this subject without remarking, that the human mind is not only subject, as the body, to diseased action, but in proportion to its superiority of delicateness and consequent impressibility, is more easily disordered, and incapacitated. I do not mean to say, that all degrees of mental disease, amount to *insanity*, as this term is generally understood and used; but, I *do* mean to say that *any* degree of such diseased action is *derangement*, and liable to *progress to a fatal consummation*.

There can be no doubt, but that multitudes are the subjects of mental disease, and consequently bereft of the normal action of this high endowment, without its being known to themselves, or suspected by their most intimate friends.

If this be true, and who can doubt it, is it a matter of surprise, that those who are *perpetually* under the influence of an acro-narcotic poison, the direct action of which, is upon the brain and nervous system, should end their melancholy course in *total insanity*? Is it not rather, just what we should expect?

Such then, are *some* of the physiological views of this subject. It is not contended or believed, that tobacco, will in all cases produce the effects described above; nor is it desired to create an extravagant apprehension of its evils: this would be unfortunate to my purpose. That these, however, are its legitimate fruits, and that they are realized in an incomparably greater proportion of instances than the masses of mankind are in the habit of believing, I entertain not the shadow of a doubt, and that no man has a *right* to expect less for himself in the indulgence of the habit.



Aside from these considerations, there are conclusive reasons for the disuse of tobacco.

On a different occasion, I should feel bound to present the moral and religious view of this subject.

\*That the expenditure of money, the waste of time, the damage of health, the beclouding the mind, the obtunding the moral sensibilities and powers, and the destruction of life, have resulted from the habit, and may again accrue, will not be doubted; and that a cause of voluntary action, producing, or even liable to produce such results, involves responsibilities of *stupendous* magnitude, is to my mind, beyond all question.

It requires no labored argument, to show that, although the habit of using Tobacco does not always lead to the drinking saloon and gambling table, there is a *tendency* to reciprocity, and, with multitudes, the one leads to the other. There is something of affinity, by which they seem bound in association.

*Personally*, the habit is one of great inconvenience, and inevitable pollution.

There are no limits to its demands, and no circumstances, by which its victim can be, even temporarily, released from its manacles.

In the family and social circle—on the highway and in the study—in the Court-House, and in the Temple of God—in the presence of ladies, and in the room of the sick—everywhere and always, its claims are imperious. And then, the

\* The annexed table, showing the annual production, cost and consumption of Tobacco in the United States, is based upon the best information that can be had of those engaged in its manufacture and sale. It is not claimed that the estimates are nicely accurate, but that they sufficiently approximate the facts, for all valuable purposes:

|   |                  |
|---|------------------|
| Annual production, .....  | 400,000,000 lbs. |
| Value, at 12 cents per lb., (low,) .....  | \$48,000,000     |
| Amount manufactured and chewed in the U. S. annually, .....                           | 60,000,000 lbs.  |
| Cost, say 30 cents per lb., .....   | \$18,000,000     |
| Amount smoked in pipes and cigars, much of which is imported<br>at high prices, ..... | 15,000,000       |
| Snuff used, .....   | 8,000,000        |

Total cost of consumption, ..... \$41,000,000

I entertain no doubt that these estimates are all below the actual figures in the case.

What a sum of money to be annually expended by enlightened, Christian Americans, in the gratification of a morbid appetite, and the destruction of health and life! A sum, sufficient to send Missionaries to every tribe of man under the heavens, and to kindle the fires of salvation upon the altar of every benighted soul of man.

discolored lips, the foul teeth, the offensive breath, the stained goatee and bosom, to say nothing of the disgusting pool of juice so often found at the feet of the devotee, are sufficient to create an utter abhorrence of the practice.

And now, gentlemen, what shall be said of the physician, who so far forgets the elevated character of his Profession, as to allow himself ushered into the room, and seated at the bedside of a lady patient, his very person an offence to refinement and taste, and his breath, a sickening stench in her nostrils?

Is it not an outrage of unmitigated turpitude upon the sex, and shame upon our humane profession?

But I shall be told that ladies also use Tobacco, and hence men should be excused.

It is true, ladies use Tobacco, and that too, in the most disgusting manner; but who is willing to justify his own act by a practice so foul, and so universally condemned by every man of sense and taste?

Except one of her sex, rioting in alcoholic fumes, and blundering into the ditch, it is hard to conceive of a more disgusting object, than that of a woman "*dipping*."

Think of it. A woman! a bottle of Mackaboy! a filthy stick—stained lips—yellow teeth—polluted breath—sick headache—nervous irritability—novel-reading—sleepless nights—hysterical spasms—blue devils, and hob-goblins! and she a wife, a mother!

Gentlemen, if I desired to wither your prospects for all time to come, and to embitter the cup of life, I would ask that such a woman should be yours.

As an expression of my best wishes, for your happiness and success, I pray that you may escape this "untoward generation."

A few days since, when on board a car with an unusual number of passengers, I saw a young girl of fourteen or fifteen years of age, indulging in this, foulest of habits. The stick, (brush) used on the occasion was absolutely black, had evidently done good service, and although the operation of "*dipping*," rubbing, sucking and spitting, was disgusting beyond endurance, this hopeful adept, seemed to become almost ethereal under the Narcotic, and finally stretched herself on the seat, seemingly, insensible to the burning shame of her

degrading habit and position. What a spectacle! who can plead for it? Let the voice of the profession be raised against it, and let *example* enforce the teaching.

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## ARTICLE II.

### FOREIGN CORRESPONDENCE.

By W. F. WESTMORELAND, M. D., Professor of the Principles and Practice of Surgery in the Atlanta Medical College.

PARIS, FEBRUARY 25TH, 1857.

*Dear Doctor*—The new anesthetic *amylène*, which for a month or two past has created some excitement in England, was, this morning, for the first time, administered in the hospitals of Paris. The numerous anesthetics that have been proposed, and found worthless, and in some instances extremely noxious, since the discovery of the anesthetic properties of chloroform and ether, has had the effect of rendering surgeons but little disposed to give credit, or to experiment with any new agents that may be proposed to produce insensibility, consequently the length of time that has elapsed since the discovery of the anesthetic properties of amylene and its introduction into the Profession, by Dr. Snow of London, and its first administration, by the surgeons of the hospitals of Paris, who as you are apprised, are notorious for their early experiments with all new remedies.

The chemical properties of amylene were discovered by M. Ballard in 1844. It is procured from an alcohol which is the result of the fermentation of the cuticle of the potato, and is known to French chemists under the name of *alcool amylique*. Dr. John Snow of London, as above suggested, has the honor of discovering its anesthetic properties, after various experiments upon animals and himself, he on the 10th November, 1856 administered it to two patients, but with only partial success. In December, he administered it in several cases for slight operations with complete success. On the 18th

December, Ferguson, of London, amputated a thigh, and operated for Stone with the patients, under the influence of amylene—the experiments in both cases were satisfactory. The 10th January, 1857, Dr. Snow made known his discovery to the Royal Society of London, reporting, at that time, twenty-two cases in which amylene had been administered. In this report Dr. Snow, gives the following as the principal facts that he had observed in the administration of this agent. The time necessary to produce insensibility varies from two to six minutes; the manner of administering it differs but little from that of chloroform. The quantity necessary to produce insensibility varies from half an ounce to two ounces. He has not observed in any case, that profuse salivation and nausea so constantly observed in the administration of chloroform; in some of the cases he has observed a rigidity of the muscles: in two cases, although there was complete insensibility, the intelligence of the patients persisted; Coma, when present, is not so profound as in the administration of chloroform. The circulation and respiration are accelerated.

The experiment this morning was at the clinic of M. Nelaton in presence of quite a number of physicians and students. The patient, a girl from 12 to 15 years of age, had for some time suffered from necrosis of the tibia—general health apparently good. The same rules were observed in the administration of the amylene as are usual in the administration of chloroform. I suppose from an ounce and a half to two ounces were administered; the time required to produce insensibility was from five to eight minutes. There was no coma, no nausea or salivation with rigidity of the muscles. The patient, during the operation, which required several minutes, was perfectly quiet, eyes open, and a portion of the time conversed with those around the bed, without, apparently, being conscious of the operation which was going on. Being questioned immediately after the operation as to whether she experienced any pain, she replied without hesitation, that she had felt no pain. She complained of slight head-ache after the operation, but did not present that stupid appearance that is usually observed after the administration of chloroform. The experiment was, by all, pronounced satisfactory; but from one case, however satisfactory, little can be said, as the nu-

merous experiments that we will likely have in the hospitals of Paris within the next few weeks may change entirely the opinion of those who witnessed this experiment, and amylene with all its pretensions may, like many other new agents that have been vaunted for a time fall in the estimation of the profession to rise no more.

There are at present in the wards of M. Nelaton, two cases of Peri-uterine hematocele, a lesion which until very recently was little understood, and even at present there exists more than one opinion as regards its precise character. For some years past M. Nelaton has paid considerable attention to this affection, and to him is due the honor of first calling the attention of the profession to it.

Peri-uterine hemotocele is an accumulation of blood forming a tumor, which is situated between the rectum vagina and uterus, and may be readily detected by an examination per vagina. The tumor varies greatly in size; in some cases it is not larger than a hen's egg, while in others it fills the pelvis, and may be felt in the illiac regions, compressing the vagina in such cases to such an extent that it is barely possible to reach the os uteri by this canal. If the tumor is large, by introducing the index and middle-finger into the vagina, which in some cases as above suggested, is rendered difficult from the great compression, and with the other hand compression is made over that portion of the tumor projecting in the illiac region, fluctuation will be more or less evident. If the tumor is small, we may cause the same sensation, by compressing the tumor between the two index fingers, one in the rectum and the other in the vagina. These tumors are in all cases situated immediately behind the uterus, apparently occupying the recto-uterine fold of peritoneum.

Much has been said of the general health of the subjects attacked, their menstrual irregularities, the rational signs which characterize the lesion, &c., &c.—each essayist giving and interpreting the various symptoms as best supported his views of the precise character of the affection. In giving the symptoms that are observed in this disease or accident, I perhaps could not do better than give the history of one of the cases above alluded to, which M. Nelaton says presents the symptoms usually observed in this affection. The patient is a stout

healthy looking woman of 35 or 36 years of age; menstruates regularly and without pain—has for many years enjoyed the most perfect health. Eight days ago, the seventh day after the last mentioned period, she was attacked with a slight pain, or rather an uneasiness, in the hypogastric, and left iliac regions. This uneasiness increased, and at the expiration of a few hours was so intense that she applied for medical aid. A warm bath was prescribed. While in the bath, all the symptoms were greatly aggravated, the pain becoming so intense that it was impossible for her to occupy any one position for more than a moment at a time. The pain, after the bath, was no longer confined to the hypogastric and iliac regions, but descended towards the pelvic outlet. The physician was again called, and prescribed anodynes, which relieved, to a very great extent, the sufferings of the patient. For eight days, sometimes suffering greatly, at other times comparatively free from pain, she remained under treatment at her residence. Upon her entry into the hospital she presented the following symptoms: But little arterial excitement, no more than could be readily accounted for by the suffering of the patient; no heat of skin or any great thirst—nothing, in fact, to indicate a symptomatic fever of any intensity—an important negative symptom in point of diagnosis. The pain upon her entry into the hospital was not so acute as she had suffered; she described it as a dull heavy pain, giving the sensation as if something was attempting to escape by the vagina, the intensity of the suffering being in the region of the sacrum and vagina. Upon an examination per vagina a large tumor was detected, situated between the rectum uterus and vagina, apparently occupying the recto-uterine fold of peritoneum. The vagina was considerably depressed, its cul-de-sac posteriorly, being entirely effaced; the uterus was slightly displaced upwards—the os uteri directed towards the symphysis pubis. The tumor could be felt in the left iliac region. By palpation, as above suggested, fluctuation was evident. By an examination per rectum, the same fluctuating tumor was detected; the displacement of the bowel, however, was not so great as that of the vagina, neither were the parts so sensitive.

Such were the symptoms presented in this case, and are those usually observed in the affection. We have here an ac-

cumulation of blood—a bloody tumor, situated between the rectum, vagina and uterus. What is the origin of the blood thus accumulated? In what tissues is it located? Many conflicting opinions have been given in answer to the above questions, as to the precise character of the lesion, more, certainly, than I can possibly notice in this letter, as it was, alone, my purpose in commencing this article, to record the views of M. Nelaton, which, as will be seen, has under-went an entire change within the past two or three years.

The first investigations of M. Nelaton, led him to regard this affection as a kind of vicarious menstruation; that the accumulated blood was nothing more than the menstrual fluid. His theory, in a few words, was, that the periodic hemorrhage, instead of taking place in the usual way from the internal surface of the uterus, was discharged from the external surface of this organ into the subserous cellular tissue; that the accumulated blood occupies the cellular tissue, uniting the cul-de-sac of peritoneum to the adjacent organs.

Since adopting the above theory, he has had an opportunity of making several post-mortem examinations of patients who have died of this affection, which has entirely changed his views as regards the character of the lesion. He has demonstrated by these dissections, that the accumulated blood occupies the recto-uterine fold of peritoneum, instead of the subserous cellular tissue, as he had supposed, thus rejecting the idea of its origin from the external surface of the uterus. By a careful dissection of the tumor, he has in several cases been able to demonstrate a rupture of the peritoneum covering the ovarys, from which it was evident from the appearance of the adjacent parts that the hemorrhage had place.

His present opinion then, is that peri-uterine hematocele is always the result of a lesion of the peritoneum; that the rupture is upon that portion of the membrane covering the ovarys, and is, perhaps, in all cases, the result of the escape of a G. graafian visicle. That the lesion producing the hemorrhage is from this cause, is rendered more probable from the fact that the accident usually occurs about the menstrual period. Since making the post mortem examinations above alluded to, M. Nelaton has been making investigations to determine the probable exciting cause of such hemorrhages from a rupture

of the peritoneum, covering a mature visicle of the ovary—a rupture which cannot by any means be considered abnormal, as it occurs every menstrual period. He says, that in quite the majority of cases that he has examined since adopting the above views as to the character of the lesion, he has found that the first symptoms of the hemorrhage, as uneasiness, pain, &c., have commenced immediately after coition.

In the case, the symptoms of which I gave above, I neglected to mention, that the first symptoms made their appearance immediately after a fatiguing sexual intercourse. Although he regards coition as the most frequent exciting cause of this accident, he is of the opinion that there is a predisposition or a predisposing cause of which, at present, we are ignorant.

There are several lesions with which this accident may be confounded, as extra-uterine pregnancy, peri-uterine abscesses, some forms of ovarian cysts, &c. Attention, however, to the history of the case, the symptoms, and a careful examination per vagina, will generally be sufficient to make the distinction.

The treatment formerly adopted by M. Nelaton, was invariably to give exit to the accumulated blood by means of a puncture through the walls of the vagina; if, however, as was sometimes the case, a simple puncture was not sufficient to evacuate the tumor, he enlarged the incision by means of a lithotome caché, turning out the clot, if necessary, with the finger. He has for sometime past renounced this plan of treatment, regarding it as extremely hazardous in a number of cases; says that the incision may be followed by the introduction of air into the cavity of the tumor, from which we may have all the unpleasant symptoms that usually result from the introduction of air into such cavities. His practice now is, to leave the tumor untouched; contending that in the majority of cases, if the patient be kept quiet, the blood will be absorbed. If, however, from some cause, the suffering of the patient is very great, or the tumor threatens to discharge its contents into the rectum, a puncture is indicated, which should always be practiced through the walls of the vagina.

The case above alluded to has now been in the hospital seven or eight days, and although the patient has at times suffered greatly, the treatment has consisted in the administration of



such remedies as would tend to keep the patient quiet. The second case—the tumor is small, has never produced any great pain, and is at present, ten days after the first symptoms of the accident, considerably reduced in size.

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PARIS, MARCH 13TH, 1857.

*Dear Doctor*—Since my letter of the 25th ultimo, in which I recorded the first experiment with amylene in the hospitals of Paris, quite the majority of surgeons of the public charities of the city have administered this agent; not, however, with the same success, as we find the most conflicting reports as to its effects. There are some who have in every case met with the most perfect success, while others have never been able to produce anesthesia—contending that it is an agent not to be relied upon—that while in some cases we may have the most complete success, in others it is entirely inert. Others, again, contend that from its odor, it is extremely disgusting to the patient, and that from its extreme volatility the surgeon and assistants are as likely to be effected as the patient.

M. Giraldes one of the surgeons to the *Hopital des Enfants Malades*, has perhaps experimented more extensively than any other surgeon in Paris. In a report to the *Société de Chirurgie* a few days ago, he spoke in rather flattering terms of the agent,—says that he has administered amylene to twenty-five patients, and with the exception of one case, anesthesia was prompt. The patients were from three months to ten years of age; they all inhaled the agent without any great resistance; and in every case respiration was calm and normal. Anesthesia in every case was obtained without convulsions, nausea or vomiting, although some of the patients to which it was administered had but a short time before taken food. The duration of insensibility varied from one to three minutes. The patients were readily aroused, and, as in the case reported in my last letter, did not present that stupid or sluggish appearance so constantly observed, after the administration of chloroform.

M. Giraldes accounts for many of failures, and the large amount said to have been employed in several cases before producing anesthesia, to the manner of its administration. He says that amylene is much more volatile than chloroform,

and if administered upon a compress, as the latter is usually administered in the hospitals of Paris, the air around the bed is impregnated with the vapor, and sometimes to such an extent, as above suggested, as to incommode seriously the assistants—the patient under such circumstances, inhaling but little if any of the agent. It should be administered so as to prevent the escape of the vapor. He has in all cases withdrawn the agent as soon as anesthesia was produced, consequently cannot judge of the length of time that it may be prolonged, without inconvenience. M. Giraldes is, however, of the opinion that it may be administered in all cases where it is desirable to produce anesthesia. As to its advantages, if any it has, over chloroform, he reserves his decision.

M. Nelaton presented a patient at his clinic a few days since which he six years treated for a white swelling of the hip joint, a disease usually described under that elastic term *coralgia*. His object, he said, in exhibiting this patient was to demonstrate the possibility of cure, in this terrible affection, and in speaking of a cure here, he said he had no reference to the usual terminations of the disease in cases where patients were fortunate enough to escape with their lives, in which we have either a dislocation of the femur or an ankylosis of the joint, but a cure in which all the functions of the limb are restored. The patient presented no deformity, whatever, of the hip-joint, it being evident that its functions were perfectly restored—the patient performing the same movements, and apparently with the same facility, with the limb in which the disease had existed as with that of the opposite. M. Nelaton contended that there was not the least doubt as to the character of the disease as by the symptoms, which were well marked, as well as other circumstances connected with the history of the case, it was readily distinguished from that less grave affection chronic arthritis, or other lesions with which this disease is sometimes confounded.

The plan of treatment adopted in this case was extensive cauterizations, over the diseased joint with the red-hot iron. M. Nelaton says that this is by no means the only case in which he has seen such a favorable result. That he has, for sometime been convinced that the disease is perfectly curable if the proper remedies be applied sufficiently early in the dis-

ease. He relies for success upon the actual cautery with such constitutional remedies as may be indicated. Says that the treatment, if successful, must be instituted early in the disease—that if we wait until there is a disorganization of the synovial membrane, softening of the cartilages, &c., before commencing the treatment, that we will invariably have either a dislocation of the head of the femur, or a partial or complete ankylosis of the joint. Says that he knows that there are surgeons, who object to the actual cautery in the commencement of the disease, regarding it as unnecessarily heroic. He is also apprised of the great difficulty in a number of cases of inducing the patient to submit to a plan of treatment, which they regard with such horror. Experience, whoever, has convinced him that it is the only remedy upon which we can rely, and even this, if deferred until the disease is considerably advanced, adopting it as a last resort as is counselled by some surgeons, will not be sufficient to arrest the progress of the disease.

The actual cautery is regarded by M. Nelaton as an important remedial agent, not only in the chronic affections of the joints, but in various other lesions.

He says that a great error is frequently committed in the application of this agent—an error which has had a tendency to bring the remedy in some disrepute. There are many who imagine that the sufferings, &c., of the patient, will be in proportion to the extent of the eschar—that a superficial cauterization will produce much less pain than one sufficiently extensive to produce an eschar, the thickness of the true skin. The reverse is true—superficial cauterization producing much more pain without any great benefit to the disease for which it is applied. He contends for the heroic application of the cautery, particularly in the affection above alluded to, producing an eschar, which sometimes extends to the sub-cutaneous cellular tissue. The location from such a cauterization which at first a little unsightly will, he contends disappear in a few years.

In a letter a few months ago, I spoke of a case of tertiary syphilis, in the words of M. Nelaton, which was being submitted, to the new plan of treatment known as *syphilization*, and promised to keep you informed, of the result of this novel treatment. There was at first, as I believe I informed you, an

evident improvement in some of the symptoms—the sufferings of the patient which were at night very great, entirely disappearing—the ulcerations at the same time presenting a more healthy appearance.

There has been but little if any change in any of the symptoms since my last report, which was, if I am not mistaken, about the termination of the first series of inoculations, or when the pus obtained from the first inoculation would no longer produce a pustule. The second series of inoculations was continued only three weeks or a month, the patient from some cause refusing to submit to the treatment. I learn, however, from M. Auzaïs Teurenne who is conducting the experiment, that the inoculations will be re-commenced in a few days. The treatment has so far been conducted without any great inconvenience to the patient, although there has been as many as an hundred chancres upon the chest and superior extremities at one time. The marks the result of the chancres are only perceptible upon a careful examination.

Yours, &c.,

W. F. WESTMORELAND.

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## ARTICLE II.

From the "Gazette des Hospitiaux."

TRANSLATED BY J. J. WEST, M. D. OF SAVANNAH, GA.

*Aneurism of the Brachial Artery cured by injection of per chloride of Iron.* By M. LAGRANGE, Surgeon in Chief of the Civil and Military Hospital, at St. Mibriel (Mense.)

Corporal Lacon, aged twenty-three years, sanguine temperament, belonging to the 5th regiment of Dragoons in garrison at Saint Mibriel, received in duel, a wound by the point of a sabre, which traversed horizontally, the thickness of the brachialis anticus muscle of the right arm, from before backwards, slightly from without inwards, (he being in guard and having the arm extended.)

The division of a small arterial branch gave place to a hem-

orrhage slightly abundant, which had as a consequence, an ecchymosis due to blood effused into the cellular tissue of the skin.

The small wound which this weapon occasioned appeared insignificant in regard to its depth, its diameter, and the parts interested; a simple dressing was prescribed, i. e. lotions of vegito—mineral water with a contentive bondage. A cure which seemed to be radical, was effected in eight days.

Five months later the Surgeon ("medicine major") of the regiment, at the request of the corporal whose duties had not been interrupted more than a week, saw his arm, in which a small tumour indolent had been progressively developed. He diagnosed an aneurism which decided him immediately to send the wounded to the hospital.

Upon his arrival 16th September, the tumour, situated upon the tract of the brachial artery of the right arm, at the superior third, 7 centimetres, (about three inches) from the cicatrix of the above mentioned wound, and bearing the form of a small egg, constituted an aneurism.

The information furnished upon its marble, upon the nature of the solution of the continuity of the muscle, and the examination of the member, and of the sabre, led to a discovery of its true cause in the lesion of the external or cellular arterial tunic superficially struck by the instrument, and in a gradual rupture of the two other tunics, abandoned to their own strength and naturally pliable.

Yielding to the pressing solicitations of the patient, who desired to be promptly delivered of an affection, of which the gravity did not escape him. I resolved to satisfy him as speedily as possible, still not fixed upon a choice of means to adopt. The ligature of the brachial artery at its superior third, inspired me with real fears for the consequences of that operation. The injection of the per chloride of iron counts failures sufficiently striking to render circumspect and even fearful the most successful surgeons. It was necessary, however to decide for either one or the other of these two methods, because the compression indirect, generally employed at present in England, and which M. le docteur Broca proclaims in his "*Traité des aneurisms*," was not practicable in this case, and I confess that, having been sometimes a witness to sad terminations after the use of the ligature, my preferences drew

me towards the injection of the per chloride of iron, the easy execution of which seduced me. I was curious to judge for myself of its veritable effects, and besides, I reflected, if the inflammatory accidents observed as results of this operation, can shake my determination, the happy facts produced by others ought to encourage me. I consulted two of my confriera, who, with me were in favor of employing the per chloride of iron.

The preparation marked 30° by the areometer of Baumè.

September 18, the patient seated upon a chair, having the arm in extension, the compression being confided to an aid I plunged a small trocar into the centre of the tumor from which a bright red blood escaped with considerable force. My intention was to disembarass myself of it completely before making the injection; but at the moment when the solution penetrated, compression being no more properly exercised, the blood which filled the sac anew, coagulated instantaneously, and the artery which continued to pulsate, was not touched. The aneurism disappeared leaving in its place a hard insensible tumour, about the size of a nut. There was no pain except that of inflammation, and, eight days after, Lacon, exposed doubtlessly to a recurrence, left the hospital in excellent condition.

On the 14th October, this man, who had returned to his occupations, was sent back to me. Our previous apprehensions were realized; the aneurism rapidly reproduced in the superior part of the first sac, which retained considerable consistence, had acquired as great a developement as formerly. This time we took the minutest precautions to arrive with more certainty at our end.

The operation was performed on the 19th, in presence of Messrs. Laurens, professor in the School of Medicine of Maucy; Eraro, chief physician of the hospital, and Pougy, surgeon of the regiment. We again employed the solution indicated above. The compression established with care above and below the tumour, the same trocar was used, and the blood permitted to escape in totality. The injection was then made successively by ten or twelve drops at a time, until from forty to forty-five were thrown in, without the patient's experiencing the slightest impression. This amount reached, he

gave utterance, all at once, to piercing cries, and complained of most atrocious pains in the axillary region, and the extremity of the little finger, caused by the irritating action of the solution on the median nerve. The arm reddened, became tumified with augmentation of head; retraction of the fore-arm. From three centimetres above to as far below the sac, the pulsations of the artery ceased, in all its extent marked by a hard cord, sensible and very appreciable to the touch. The radial and ulnar arteries were no longer felt. The violence of the pain persisted during fifteen hours; the evening of the next day it was again very severe. The member, always swelled, preserved its heat.

From this time the inflammatory phenomena disappeared gradually under the influence of emollient applications, but the retraction of the fore-arm did not cease before the expiration of twelve days.

On the 25th October, feeble pulsations re-commenced in the ulnar and became more and more pronounced; those of the anterior recurrent branch of the ulnar had never been discontinued, but nothing palpable re-appeared in the brachial or at its bifurcation. It was not until the 17th November that pulsations began to be perceived by the touch. During ten days they were very obscure nothing being felt by the finger except a slight trembling. Little by little they augmented in force, without, however, arriving at a normal state. One month of repose was accorded the soldier, who perfectly cured, continues since that time, to enjoy the best health. He has recommenced his duties; the movements of the member are executed with ordinary freedom, and the elimination of the blood coagulated in the artery and the cyst has already reduced it sensibly in consistence and volume.

*Observations by the Translator.*—This method of treatment was conceived at the commencement of the present century, but was not brought before the public as really practical, until three or four years since, when experiments were instituted by men whose names a failure could not injure, and whose efforts seemed for a while completely crowned with success. Their high authority with three brilliant successes, in a little time secured for it the warmest welcome, and it was at first believed about to supplant every other method of cure. The faci-

lity of its execution, with its apparent freedom from danger went greatly towards its general reception. We will see with how much justice these two great qualities were ascribed to it. The report which I have given above presents one of the dangers attending its use, that of consecutive inflammation, and the numerous failures to which it submitted, illustrates its facility. After the first cases were reported the whole profession grasped it with an energy only to be accounted for by the dangers attending, or almost perfect inutility of those methods then in use. The ligature, compression, direct or indirect, electro-puncture, were all objectionable, either by the danger and difficulty of the first, the difficulty and sometimes impossibility of the application and correct graduation of the second, and the general failure of the third. With all these considerations the profession was ripe for the reception of anything; the name of Lalleman heading as it did, the list was hardly necessary to warrant at least a trial. But contrary to the expectations and hopes of all, this new remedy was destined to sad reverses. The next cases in which it was tried were either partial or perfect failures. The old favorite, the ligature had in some, to be called in to its assistance and in others even that was not enough to prevent death. The reaction was complete, as well as sudden. The Society of Surgery condemned it, with hardly a dissenting voice. This was scarcely a year after its first appearance. But is it worthy this unanimous condemnation? or was it worthy the enthusiasm at first created in its favor? Perhaps neither the one or the other. It is hardly yet possible to appreciate its value. Its successes certainly seem to warrant its application, under some circumstances, and prove that it is not altogether a dangerous or useless remedy, while its reverses should make the surgeon careful in its use. To what cases is it applicable? under what circumstances should it be avoided? why does it succeed in one case and fail in another, seemingly analagous? These are questions yet to be answered. Some of these we will attempt in this article, others must be left for experiments yet to be instituted.

The credit of this invention is due to Monteggia, an Italian Surgeon, who first proposed the injection of astringents, such as alcohol, taurine, acetate of lead, &c., into aneurismal sacs,



for that very purpose, accomplished by the per chloride of iron, whose properties were not then known. (*Istituzioni chirurgiche*, (1813.) He refers to it in several parts of his work, and without laying too much stress on so new an idea, seems to regard it as not only plausible, but likely to succeed if properly attempted. He does not seem, however, to have experimented sufficiently to assert its superiority over other methods, but says enough to merit the praise of its invention, if not of its thorough application.

After him there was a long silence. In 1835 Mr. Leroy again brought it forward, not, however, in connection with the aneurismal sac directly, but rather to stop the flow of the blood in arteries. In his memoir he speaks of experiments made upon horses, carotid, and also in the use of the galvanopuncture. He found that the clot formed by the first was not sufficiently hard, and gave the preference to the latter. In 1841, Mr. Wardrop of London proposed the use of acetic acid; to him is due the idea of compression exercised on the artery above and below the tumor, (process carried out afterwards by Pravaz.) The use of sulphuric acid was proposed about the same time by Bouchut, but not attempted on account of its too caustic properties. Ramboud proposed and executed injections of vegetable acids, such as acetic and citric acids, and after a series of experiments gave the preference to the latter. His experiments were not made upon aneurisms, but upon other sanguine tumors, with which generally he succeeded, (1848).

Up to this time M. Pravaz of Lyons had been engaged in testing the coagulating property of his electricity. His purpose was that of many others, the cure of aneurisms, but when by the efforts of M. Petriquin this method had entered into common practice and its inefficacy sufficiently proved, his experiments in the laboratory brought to his mind the powerful effect of the per chloride of iron upon the blood, and he dreamed for the first time of its employment in aneurisms. He then recommenced the experiments of Leroy, but with a liquid incomparably superior. After having had constructed an instrument which still bears his name with that of Charrieri, he commenced with energy a series of trials which resulted in the most complete success. Before making much

progress, however, he was interrupted by illness, and it was only at the urgent solicitations of Lallemaud, who comprehended fully their utility, that he consented to commence anew his experiments. Lallemaud, Pravaz and Petrequin then undertook together this important labor at the veterinary school of Lyons. They made injections into the carotids of sheep and horses, and so satisfactory were the results that Lallemaud immediately wrote to the Academy of Sciences to make known to his confriars, the precious discovery of Pravaz. This letter was inserted in the annual report of that institution, in 1852. After the death of Pravaz, in June 1853, Petrequin, with that bitterness and want of generosity to be found only among French physicians, accused Pravaz of desiring to assume the whole credit of the discovery and omitting altogether his name. Then followed a long and disagreeable personal discussion, which resulted happily in the confusion of Petrequin, and the honor of truth and the dead. The history of this subject shows that the principle, that of coagulating the blood in aneurisms, did not originate with Pravaz; for Monteggia, Bouchut, Leroy and Wardrop, with many others had been seriously engaged in the same pursuit, but Pravaz, and he only, deserves the credit of the introduction of the use of that fluid which has been found most successful. "Honor to whom honor is due."

Upon the return of Lallemaud to Paris, he communicated more fully to the Society of Surgery, the results of his experiments, and by a singular coincidence, M. R. Desloug-champs, on the same day made a report of a case of aneurism, cured by two injections of the per chloride of iron. This was a traumatic aneurism of the *supra orbital artery*. The history of the case given above, is much the analogue of that reported by M. D—s, the ultimate result, the cure, being the same. M. Nipce, reported another, April 25, which was also successful, but, in which the accidents were much more severe; the consecutive inflammation existed for many days, and on the eleventh day of the tumor, which fluctuated, had to be opened, giving exit to a considerable quantity of a sero purulent matter. On the 20th day the cure was complete, nothing being felt in the place of the aneurism but a small, hard and indolent tumor.

Another case with still severer accidents was reported the 9th of May by M. Serres. The tumor was an aneurismal varix of the end of the elbow; coagulation was obtained as in the other cases, and when the compression had been removed pulsation had entirely ceased. The radial and ulnar continued to pulsate, but the pulsations ceased in them also, after the clot, by progressive formation had passed the point of junction of the recurrent branches. Intense inflammation was developed, which only yielded after the pus formed in the sac had been evacuated. An eschar was formed and was detached without hemorrhage.

These three cases were the first reported after the discovery of the influence of the per chloride of iron, and although they all resulted favorably, Mr. Malgaigne remarked that the accidents were severer progressively from the first to the third. After these, others were published in different parts of the country, giving various results from complete cure to the saddest end. Without enumerating the whole of these, or entering into a minute account of any of them, I will merely give the results of a few. The first reverse was sustained by a Mr. X of Paris, who neglected to make sufficient compression: the result was gangrene which necessitated amputation, and the patient died. Three others lives were lost, and several times the patient could be saved, only by the timely application of the ligature. These accidents warranted Mr. Malgaigne in reading before the Academy a memoir against its use, which struck this new method a blow, from which it has not yet recovered. Three new successes obtained in a few weeks, were not enough to efface this impression, so strong is the authority of the Academy. Was the sentence just? Could not this method be employed in America with more success? In the first place almost all of these experiments, for we can thus name them, were made in hospitals, either in Paris or the provinces, and the average mortality consequent on severe operations, is so much greater in the hospitals of Europe than in private practice, that we can hardly judge of the efficacy of this method by the cases which have been reported thus far. Secondly, I find by looking carefully over the list, that in several of the disastrous applications, the most necessary provisions were entirely omitted or not properly ob-

served, such as compression above and below, the injection of too much of the liquid or of a preparation so strong as to become a caustic to the tissues; its use in cases altogether hopeless from the situation of the aneurism; the adjustment of an injurious apparatus to effect compression after the injection; and perhaps, an after treatment, not well directed. Still however, there were cases, in which all was done that could have been, and yet, important operations were rendered necessary, and even death supervened in spite of all the skill of the first surgeons in the world. Twenty-one cases in all were reported, the comparative results of which do not seem favorable to this method. Omitting one of the Aorta, another of the Arteria Innominata, and still another of the sub-clavian Artery; of the remaining 18 there were nine cures, four deaths, and five cases necessitating severe surgical operations.

There is still another consideration not recommending too strongly this new method; it was this, that in almost all cases in which it has been employed with success, the tumor was so situated that the ligature might have also been applied with perhaps less danger. One of the necessary features of those cases permitting the injection of this fluid, also permits the ligature, viz: the possibility of compression's being exercised above the tumor. In no case where compression was not or could not have been made, was the treatment successful; and this compression must be *perfect*; now where this is possible what hinders a skillful surgeon's trying the artery, when he is comparatively free from the terrible dangers of the consecutive inflammation and gangrene.

Without pursuing these remarks any further, I will give a brief and general review of the *modus operandi*, for the benefit of those of your readers who have not read the admirable treatise of M. Broca, on aneurisms. To do this I will follow his remarks as closely as the brevity of this article will allow.

The best substance for injection is that which unites the three following conditions: 1st prompt coagulation, 2d, the formation of a clot of great solidity, 3d. action on the tissues but slightly irritated. Unhappily the last seems incompatible with the others. The chloride of zinc, taurine, alcohol, creasote and the vegetable acids fail in one or more of these qualities. Thus far the per chloride of iron seems to unite them

more perfectly than any other substance known, for that reason, it is the one generally employed. All the persalts of this metal possess coagulating properties, but the others are too irritating to be made use of. The irritating principle of this fluid is said to exist in its chlorine, and apparently with justice, as it is known that the action upon the tissues is in proportion to the strength of the solution. The acetate of iron has been employed in two cases with success, by Mr. M. Lusana and Pavesi, but has not been sufficiently experimented with to give satisfactory results.

Experience has proved, that the strength of the solution of the per chloride of iron best adapted to this purpose is about 30° areometer of Baumè. Higher than that figure, it acts as a caustic, producing destruction of the tissues, and in many cases gangrene. A still lower is perhaps safer, but when carried below 15° a 20°, the action is slow and very imperfect; the clot that is formed is soft, and acts perhaps more as a foreign body than when the tissues are sufficiently irritated to throw out an adhesive and organizable plastic lymph.

A graduated syringe, with the piston grooved so as to turn like a screw, and to inject a known quantity with each turn, is the instrument of Pravaz. Each half-turn injects about one drop, a measurement sufficiently exact. A small trocar and canula fitting precisely the extremity of the syringe is also necessary for the completion of the apparatus. For the operation, the first movement is to secure the compression of the artery, which must always be made *below* the tumor, first. That above had better be made by the tourniquet for greater security, as the danger of a flow of the substance in the direction of the larger arteries is always more to be feared. Compression being satisfactorily adjusted, the trocar is plunged into the tumor, and then withdrawn, leaving the canula well in the cavity: the syringe is then fixed securely into the free extremity of the canula, and the handle is turned by degrees, waiting a few seconds after each four or five drops injected, until a clot is formed in the aneurism and the artery adjoining. Compression should be exercised during five or ten minutes after the formation of the clot, to prevent a flow of blood against the newly formed clot, or an entrance of the injected fluid farther than is absolutely necessary. When about to withdraw the canula, it is best to give a turn of the instrument

backward: this action fills the extremity of the canula by a clot, and prevents the contact of the liquid still in its cavity with the tissues, covering the tumor. It has been seen that extreme pain and consecutive inflammation are almost always consequences of this operation; to combat them, the usual anodyne and antiptilogistic treatment, sometimes pushed with vigor, are necessary. Nothing acts better than the cold water dressing so common with us.

## SELECTIONS.

*A Monograph on Ovarian Tumors; with an extended view of Ovariectomy as a means of cure.* By T. M. TWEED, M. D., of North Liberty, Ohio.

[CONCLUDED.]

THE RADICAL CURE OF CYSTIC DROPSY BY OVARIOTOMY.—Ovariectomy is apparently an easy, although a very dangerous operation. Nothing can be more simple than making an incision from the ensiform cartilage to the pubis; it is done at any *post mortem* examination; but the effects of such an opening in the living subject, are fearful in the extreme, and in many instances, fatal.

In the present state of our knowledge, opening the peritoneal cavity is no longer considered to be an operation of necessity fatal, and it does not require a number of experiments, like those of Dr. Blundell's, to put the question at rest. Nearly three hundred cases of ovariectomy are already recorded, and the results of these cases, it will be our duty to investigate.

Before we admit the legitimacy of an operation like that under consideration, we must distinctly determine three questions, which are of the utmost importance, and to these we shall now direct our attention.

I. *What is the common course of ovarian dropsy, and what the result of its ordinary treatment?*

II. *What are the results of those cases in which the cyst has been extracted?*

III. *And what is the fair conclusion to be deduced as to the practicability of the operation, on a review of the two former questions?*

Before entering upon these questions, it will be proper to be thoroughly acquainted with the opinions held by those who are worthy of our confidence. We do not wish to place much stress upon individual opinion, and especially where it has not been formed by actual experience; but we do hold that the opinions of our predecessors, and those who have obtained eminence in their profession, are worthy of some consideration and reflection.

The operation of the extraction of cystic tumors is only of recent date in England, though practiced successfully in the United States nearly fifty years ago. It is slowly, but surely, taking its position among the acknowledged legitimate operations of Surgery.

It is said to have been proposed first by Vanderhaar, and afterward by Delporte, Morand, and Logger. It was first undertaken by L'Amonier of Rouen, and afterward, in 1809, successfully performed by Dr. McDowel, of Kentucky. The operation was performed at Edinburgh, by Mr. Lizars, in 1823, who was unable to find a tumor; and in 1826, Dr. Granville of London, operated on a patient but was unable to remove the tumor. Since that time, about three hundred patients have been operated on with variable success. About one in four of all the known operations have proved fatal.

Mr. Clay and Frederick Bird, of England, have operated oftener than any other two men in the world.

Prof. Atlee, of Philadelphia, has operated oftener than any other American surgeon. Next to him in the number and success of his cases, was the late Dr. Buckner, of Cincinnati.

Sir Charles Bell thought the dangers arising from the operation itself, were quite sufficient to deter the surgeon from undertaking it.

It is the opinion of Dr. W. Hunter, that incision ought not to be attempted; he says, "It has been proposed indeed by modern surgeons, deservedly of the first reputation, to attempt a radical cure by incision and suppuration, and by the excision of the cyst. I am of the opinion that excision can hardly be attempted, and that incision and suppuration will be found by experience, to be an operation which cannot be recommended but under very peculiar circumstances."

Mr. Lawrence thinks extirpation of the ovarium is an operation so likely to kill the patient, that he does not think it advisable to proceed to it.

In the opinion of Liston, these operations are exceedingly unjustifiable.

Prof. Meigs even goes so far as to say, that "operations for the extirpation of the diseased ovary, are not to be justified by the most fortunate issue in any ratio of cases."

And, Dr. Seymore, who has written on diseases of the ovaria, states that the arguments against such an operation are numerous and strong, and the probabilities of success, very small. "If the tumor be not large, or the woman's health unbroken, she may live many years—as long as is allowed to humanity, in the enjoyment of a tolerable existence. If the health be much broken, the cure of so large a wound, in a weakened constitution, would be difficult, if not in the majority of cases, impossible."

"If connected with scirrhus in other parts of the body, it is inadmissible; and if the growth itself be of the nature of fungus hæmatodes, all experience tells us that, should the patient survive or the wound heal, the disease will recur in other vital organs of the body. Nor do its difficulties rest here; when these growths enlarge to a great extent, they must frequently adhere, *and then the operation is out of the question*. If all these exceptions then are estimated, the case which remains, in which such risk is advisable, and such an operation feasible, with any fair chance of a happy result, is rare indeed."

These, then, are some of the opinions held by men high in the profession, upon the subject of ovariectomy. The authorities which favor it, will be considered, when treating of the operation itself. We will, so far as we have the ability, produce every fact within our knowledge, both for and against the radical treatment by extirpation, and endeavor to form a just estimate of its practical value. In a matter so momentous to the interests of humanity, and of such transcendent importance to science, any other course would be criminal.

I. *What is the ordinary course of ovarian dropsy, and what the result of its usual treatment?*

This question has been examined to some extent in a preceding part of this paper. But we must now descend to particulars. As before stated, this disease is most common in, and usually attacks patients about, the prime of life, when the sexual organs are fully developed, and their functions in a state of excitement. When once established, it continues to increase, and in half the cases, terminates in death in two years. Nine-



ty, out of one hundred and twenty-three, died in four years, leaving only thirty-three patients, or not quite one in four, to survive that period.

In order to prevent this severe mortality, the means already referred to have been introduced into practice, and we have seen with how little success, even as palliative measures. We have shown that paracentesis has the preference as a palliative; that is, the lives of some patients have been more prolonged by the operation than by any other treatment. It now becomes us to inquire, whether or not this is the *usual* result.

It is admitted by all, that this operation "is the beginning of the end;" that it will require repetition during longer or shorter periods; exhaustion or inflammation, produced by the operation itself, generally terminating the case.

In unilocular cysts, this operation may be repeated several times, without producing serious results; and while the disease retains this character, it may be relieved for many years by the operation; but experience demonstrates that the tendency of these unilocular cysts is to produce others upon their inner surface, and when this is effected, the danger of the operation is greatly increased.

There can be no doubt that, as in the cases mentioned, tapping does prolong for a considerable period the lives of some patients; but all will agree that, after the first tapping, the necessity of the operation becomes much more frequent, the re-accumulation of fluid being more rapid, until the patient is worn out by disease.

In order to ascertain the mortality following this operation, and the extent of the benefit derived from it, we have collected a table of forty-six cases in which the results were recorded. Of these 46 patients, 37 died, and 9 recovered, and are supposed to be living. Of the 37 patients, more than half died within *four* months; 27 of the 37, died within one year; and of this number, 18 were only tapped once. This exhibits a great mortality, not only to the operation generally, but to the first tapping in particular. Admitting the nine cases reported to have recovered, were all perfect cures, we have more than five deaths to one recovery; and it is more than probable, that most of those nine ultimately died of the disease.

It may be said, that in these cases, the disease itself would have proved fatal, had not paracentesis been resorted to. In many, no doubt this remark holds good, and some would have fallen a sacrifice; but when considered as a means of cure, these data furnish a pretty just estimate of the value of tapping.

We are aware that our conclusions do not correspond with those of many practitioners. The old notion of the harmless nature of paracentesis, and the perfect safety of its frequent repetition, is an incorrect one; and referring to individual practice we find, that for one of the extraordinary cases that survive fifty or sixty tapplings, many die, and that in a very short period.

At the very best, then, tapping is a very dangerous means of palliation; when had recourse to it must be frequently repeated; and the relief afforded between each operation, becomes gradually less, and the dangers consequently, greater. These are reasons—strong and persuasive—for seeking some other mode of treating ovarian dropsy, that will promise more hopeful results.

II. *What are the results of those cases, in which the cyst had been extirpated?*

Dr. Blundell, nearly fifteen years ago, instituted a number of experiments to show that the peritoneum might be opened with comparative safety, and stated it to be his opinion, that abdominal surgery would be better understood, and that the extraction of the ovary would become a legitimate operation. Gastrotomy, since that time, has been performed more than two hundred times, and the results are before the profession in the form of tabular statements. The statistical researches of Lee, Churchill, Atlee, and Buckner have been published, and a reconstruction of the Tables is unnecessary; the more so, as we are assured, that the ratio of mortality attending the operation has steadily diminished, with the multiplication of operations.

But even here we must be cautious in our judgment. While we may rest assured, that we have all the successful cases, are we quite certain that we have a full report of those which have proved unsuccessful?

To this inquiry we regret that we are compelled to give a negative answer. Mr. Philips states, "I have heard particulars of other *five* cases, of which at least *three* were unsuccessful; but I cannot venture to use them. As any honorable man should be equally ready to publish his unsuccessful cases, we may look for the authentic particulars hereafter."

This opinion is confirmed by Dr. F. Bird, who says, "It is deeply to be regretted that the profession were unable to form any correct opinion on the subject [Ovariectomy] from motives that could not be too strongly censured. Unsuccessful operations had been most carefully suppressed, while those in which a happier termination occurred, had been hurried into publicity, even before the patient had been fully recovered, and while the ligature was still contained in the abdominal cavity. Within the last few weeks, the abdomen of a patient had been laid open, in which no tumor was contained; in another example in which the operation had been performed, death had been ushered in with all the symptoms of strangulated intestine; in another, in which the abdominal section had been employed, the patient had quickly died; yet were all these cases carefully concealed, while those in which recovery had taken place, were made the subject of daily advertisement."

The writer of this Essay is aware of three cases, all of which proved fatal shortly after the operation, but of which no authentic particulars have as yet been published. Let the scorn and contempt of all honorable men, rest upon such shameful and criminal concealment! As long as such a selfish spirit as this actuates medical men, so long must we hope in vain to arrive at a final or correct judgment; for the deaths not recorded, would make a material difference in the ratio of mortality.

So complete is Dr. Atlee's analysis of the statistics of gastrotomy, that it would be a work of supererogation to review the whole ground occupied by his labors. It is sufficient for our purpose to state that the statistics indicate a rate of mortality equal to twenty-five per cent. This result, of course, includes all the exploratory operations; for they were commenced with the view of completing them, had circumstances justified it. They involved the section of the peritoneum, and the consequent hazard of the complete operation.

What strikes us as very remarkable in the statistics, is the great number of cases in which, from an error of diagnosis, the surgeon has been compelled, after the operation was commenced, to abandon it. And this is one of the most serious arguments against the operation. Lizars, Clay, Dieffenbach, West, and other distinguished surgeons, have com-

mitted this grave error. Indeed, the tables show, that two out of every eight patients submit to the abdominal section, when the tumor can not be removed on account of adhesions, or when in fact no tumor is to be found.

It has been stated that ovariectomy exhibits a less degree of mortality, than most of the acknowledged capital operations. If this be true, it is a valuable argument in favor of the procedure.

Malgaigne has shown that out of 852 amputations of the extremities of all kinds (including those of the fingers and toes), which were performed in the Parisian Hospitals, from 1826 to 1841, 382 died, or about four out of every ten proved fatal.

Among these, out of 201 amputations of the thigh, 126 died, or six in every ten; out of 192 amputations of the leg, 106 died, or five and a half in every ten; out of 91 amputations of the arm, 41 died, or four and a half in every ten. Of the amputations of the thigh, in 46 cases the operation was performed for severe injury of the limb; of these 34 died, or more than seven out of every ten.

At the Glasgow Infirmary, the mortality in cases of amputation, is four in every ten; and at the Edinburg Infirmary, five in every ten.

Mr. Philips has collected the histories of 171 cases in which the large arteries were tied; of these, 57 died, or about three and a half in every ten. Sir A. Cooper, in his work on Hernia, records 36 deaths in 77 operations for that disease, or nearly five in every ten. These are a few of the recorded results of some of the capital operations, and we find that the ratio of mortality in them, is even greater than in ovariectomy. But, perhaps, this is not a fair comparison, because in the operations named, there is a necessity compelling the surgeon to act immediately (in many cases) whatever may be the co-existing circumstances; whereas, in cases of ovarian disease, no such necessity exists. The health of the patient may be good; many live a considerable period—on an average, four years; but if the operation is fatal, it is so in a few hours, or days at most.

In all the numerous cases recorded as having undergone the abdominal section—without a removal of the cyst, the cause of failure has been the want of a correct diagnosis, either as to the nature of the tumor (some being omental and others uterine), or the extent and complication of the adhesions.

It is of the utmost importance, that a correct opinion be formed, as to the nature and extent of the adhesions which may connect the cyst with the peritoneum or the abdominal viscera. The question hence arises, are there any means by which this complication can be ascertained?

If we study the experience of the past, I fear we shall come to the conclusion, that this complication can not always be accurately ascertained before the operation; for surgeons the most cautious and skillful have been deceived, and adhesions found in cases where they have been least suspected.

There are some presumptive signs, which, after a careful examination, may become very valuable.

When an ovarian sac has attained a size, which is productive of great inconvenience and distress to the neighboring organs, the parietes of the abdomen become greatly attenuated, and the space between the recti abdominalis is much enlarged; this is well seen if the patient be told while lying on her back, to raise herself into the sitting posture, without the

aid of her arms; and if the sac within be free in its motions, it will be protruded through the space between the recti muscles, and present an oval enlargement. But supposing the cyst to be intimately adherent in front, no such bulging will take place. We have tested this sign in several instances, and remarked the truthfulness of it.

Another indication of this sort is valuable, and that is the action of the diaphragm upon the tumor. If the measurement of the abdomen be obtained after the patient has taken a deep inspiration, and again, after a full expiration, we will find that the two measurements frequently vary an inch or two, *when the cyst is free*; showing that the diaphragm, in the inspiratory movement, had driven down the unattached cyst, while the expiratory effort allowed it to repossess its original position in the abdomen.

Again, by placing the hand upon the abdomen, and with the fingers grasping the parietes, we may frequently feel that the movements of the cyst are unconnected with those of the abdominal walls; and this is much more marked when an ascetic fluid is present; here, also, a sudden tap will allow the fingers to come in contact with a hard substance below, proving that a space exists between the tumor and walls. When ascites is present, the sac is usually free from adhesions.

The position of the pelvic viscera gives great assistance to the elucidation of the diagnosis.

If the bladder is free, and after being emptied of urine, is filled with air by means of an electric tube, it will pass above the pubis, and can be detected by the resonant sound it produces on percussion; thus proving that no adhesions in that position prevent its ascent. The uterus, if perfectly free, can be thrown by the uterine sound upon the rectum, or to either side, showing that the cyst is connected with it. Another test which has been resorted to, with the view to detect adhesions to the pelvic viscera, is to place the patient on her knees with the shoulders lower than the pelvis; in this position, the tumor is thrown by gravity into the abdomen, and toward the diaphragm, and by examination per rectum and vagina, we may almost certainly determine whether adhesions exist.

If no adhesion exist, the tumor will have receded and left all the pelvic viscera free. But if they do exist, either to the rectum, uterus, or bladder, the weight of the tumor will drag with it the organs attached, which may readily be determined by the finger; and if adherent to the peritoneum lining to pelvic cavity, it is recognized by the fact, that we are unable to raise the tumor above the brim of the pelvis, by pressure made through either the rectum or vagina.

Another important test of adhesions, is tapping. If there be any doubt of this complication, before the operation of extraction is recommended, the patient should be tapped a few weeks previous to the operation; by this means we are enabled to ascertain whether adhesions exist or not, especially if present in the anterior parietes of the abdomen. On the withdrawal of the fluid, the walls of the abdomen have a drawn and puckered appearance, and are observed to follow closely the contracting cyst, while the cyst itself does not descend into the pelvis. This is observed when adhesions are present. Whereas, when the cyst is free from adhesions, it may be found after the evacuation, low in the pelvis, forming a hard tumor, while the walls of the abdomen remain free. If now the tumor is grasped through the flabby and relaxed walls of the abdomen, and lifted up from the pelvis, we have pretty conclusive evidence that no adhesions exist, either to the walls of the abdomen or pelvic viscera. After

we have obtained this information, the cyst may be allowed to refill, and its extraction proposed.

A fine example of this character came under the observation of Dr. Buckner; and by the means already described, he detected adhesions and solid matter. He remarks, "The patient was very desirous to undergo the operation of ovariectomy, but fearing extensive adhesions I tapped her, and drew off thirteen gallons of fluid of albuminous character. The walls of the abdomen were distinctly seen to follow the contracting cyst. A solid mass which was present proved that the cyst could not from the adhesions, pass down in the pelvis, for it remained stationary on both sides, and above the umbilicus; the operation was therefore abandoned. She was tapped several times subsequently, but finally died; and a post-mortem examination revealed extensive adhesions, and fully proved the correctness of our diagnosis, and the propriety of declining the operation of extirpation."

Adhesions are supposed to exist, if the "crepitus" pointed out by Dr. Bright is present. But they may exist and no such sensation be produced. In some cases this sound is very distinct, while in others it is not so, and therefore it cannot be relied on.

It has been thought that the history of the case, would throw some light upon the existence of adhesion; that they might be traced to some inflammatory attack, and that after such an attack, they were to be apprehended.

Mr. Philips says, in an admirable article on the subject, that "the crepitating sign pointed out by Dr. Bright, is only present when the adhesions were recent; and as to the motion of the tumor with the diaphragm, considerable adhesions may exist, without much interfering with it. Our main reliance therefore upon the signs of peritonitis; if the evidence is clear that peritoneal inflammation had existed, it is probable that adhesions were present, but we may find adhesions where there has been no reason to suspect peritonitis. Still extensive adhesions, in the absence of symptoms of peritonitis, are by no means common. It is then mainly upon this point, that we must rely before proceeding to the operation.

The size of the cyst, and consequent pressure on the surrounding parts, cannot account for adhesions being present, since we know that ovarian sacs of equal size or greater magnitude may exist, although no such morbid connections are formed.

The mobility of the tumor was considered indicative of the non-existence of adhesions. This is always a very favorable sign, and shows that the tumor is not closely connected with the surrounding tissues; but extensive adhesions may exist even in this state. Dr. Clay, in his second case, met with this difficulty; he found the tumor quite movable in all directions, except for a few inches anteriorly, where he supposed it to be adherent; but on making the incision for the operation, the tumor was found to be adherent in all directions.

From these observations we find, that all the usual signs by which we endeavor to discover the existence of adhesions, are not always to be relied on. If the tumor protrudes between the divided recti, it does not indicate the absence of adhesions *posteriorly*, although it may be depended on as far as the anterior surface is concerned.

And last of all, even the mobility of the tumor is not to be depended on, for it may be readily pushed from one side of the abdomen to the

other, and yet there may exist adhesions so strong, that they require a scalpel for their division.

But although the dependence on these symptoms singly, may lead us into error, the combination of many of them, will generally be conclusive. Supposing the patient, when rising by her own exertions, protrudes the cyst as an oval, bulging tumor through the space left by the separation of the recti; that on a deep inspiration, the tumor is pressed downward toward the pelvic cavity, and then recedes on an expiration; that the bladder is free, and can ascend into the anterior part of the abdomen, when filled with air; that the uterus and rectum are found free, and can be moved at pleasure by the finger or uterine sound; that all crepitation is absent, and the tumor tolerably movable; then we may with satisfaction say that adhesions do not exist. An additional evidence would be, if the patient had previously been tapped, the entire disappearance of the sac after the operation.

Some state, that after tapping the sac usually adheres to the puncture of the parietes of the abdomen; but this is not correct. It may occur, and no doubt does, in some instances, but not generally.

Besides the complications of adhesions, another important fact ought to be borne in mind in the treatment of these tumors, viz, the frequent concurrence of other organic diseases. A reference to the statistics will show that in numerous instances, one or more of the viscera were greatly diseased; consequently, in those cases, the operation ought not to have been performed. The average proportion of such complications, was one in thirteen cases,—and where they existed, the mortality was thirteen in seventeen.

In all such cases, the operation is not to be justified; and we must charitably conclude that the operations in the cases referred to, could not have been aware of the complication, or they would not have undertaken them. The diagnosis was not accurately ascertained, and the results were fatal.

We have now, at the risk of reputation and prolixity, presented our views of the History, Diagnosis, and Pathology of ovarian tumors; and considered, also, at some length, the relative value of certain methods of treatment. The motives for this repetition and prolixity, will be better appreciated by the young practitioner, when he refers to the standard text books, and finds a few pages only devoted to so important a subject; and, especially, when he remembers that a few sentences from his medical teacher, comprises his whole education in the premises.

The different modes of operating in cystic dropsy, will next claim our attention.

There are two methods of performing ovariectomy, designated the Major and Minor operation. All operations, in which the incision varies from two and a half to six inches, are denominated minor, while where it exceeds six inches, the title of major operation is fully justified. These two modes of operating have divided surgeons into two classes,—those who favor the large incision, and those who prefer the small. The arguments of those holding to the major operation, appear very plausible, although the results presented by statistics are not so favorable as those arising from the minor section.

The advantages of the major operation, are said to be, that there is sufficient space for the operator to perform his manipulations; that the adhesions can be seen and cut through by the scalpel, instead of being torn

by the hand: that the cyst can be removed entire from the abdomen, thus preventing the escape of fluid into its cavity—which circumstance is said to be a great source of mortality in the minor operation; that the fleshy masses connected with the cysts can be removed without difficulty, whereas, in the minor operation, they cannot be removed at all; and that if any blood or fluid escape into the cavity of the abdomen, it can be removed without injury, which is almost impossible in the minor operation. These are circumstances which the experienced operator can appreciate, and if he should not be blinded by undue fears of peritoneal inflammation, he will be sure to estimate highly such palpable advantages.

The objections raised to the major operation are, that in the majority of cases, the incision is unnecessarily long; that the same end can be attained by milder means; that from the extent of peritoneum exposed, there is more liability to inflammation; and that there is a greater liability to the escape of the intestines, and consequently a greater tendency for them to take on inflammatory action.

The principle of the minor incision, is to make as small an opening as possible through the parietes of the abdomen and peritoneum; seize the sac with a volsellum, so that it should not recede when tapped; then puncture the cyst and evacuate the fluid; draw the sac through the opening, tie the pedicle, and detach it. This operation is admirably adapted to that form of the disease, in which the cyst is single, and uncomplicated with fleshy matter, and in a great many cases, this point can be pretty readily ascertained; but when adhesions to any extent exist, when the sac is multilocular, or when there is a large quantity of hardened substance, it would be impossible to withdraw the sac through a small opening.

Mr. Jefferson was the first person in England who adopted the small incision. In 1833, he operated successfully. The incision he used was about two and a half inches long; and after evacuating the fluid with a trocar, the sac was drawn through the incision and a ligature applied to the pedicle; the cyst was then removed. This mode of practice has been adopted by King, Lane, West, Philips, Bird, and many others.

On referring to the Tables we find, that of 85 patients where the large incision was employed, 50 were cured, and 35 died, making a mortality of *one in three* nearly; in 23 cases where the small incision was used, 19 were cured, and 3 died, making a mortality of nearly *one in six*. From this statement, therefore, we should arrive at the conclusion, that the small section is much more favorable to life than the large one.

We must remember, however, that many of the cases which were operated upon by the large incision, were quite unfit for the smaller operation; and, therefore, the patients would have been left to the natural course of disease, had not the major operation been performed. Again, a vast number of the cases presented the complication of strong adhesions, existing between the sac and parietes of the abdomen, which could not be overcome by Mr. Jefferson's mode of operation. And, lastly, we must bear in mind, that where the large section was used, the cases were more severe, and the complications greater, than in those of the other operation; from this cause alone there would of necessity be a greater mortality.

On the other hand, instances are recorded, where the boast of the operator has been the "entire" expulsion of the cyst, after the larger incision had been made, without adhesions or complications. *In such cases, would it not be better to employ a smaller section, and forego the triumph?*

But to conclude, if, after mature deliberation, and frequent examination, we are led to the conclusion, that the case under treatment, is one which presents a fair chance of success, if subjected to the operation, while, if it remains without surgical interference, the patient may die, the surgeon should not follow any particular plan laid down by his predecessors; but if the cyst can be extracted by the minor operation, it is the safest and best procedure. Again, if the minor section is commenced, and difficulties present themselves, nothing can be easier than the enlargement of the incision; thus giving the patient a chance of being cured by the safer operation, and, if it fail, we may still proceed to relieve her by the major operation.

Although it has been stated that the cyst should be removed entire, without rupture or tapping, we do not see very peculiar advantage to be derived from this procedure. It is true there may be danger of the fluid escaping into the abdominal cavity; but this accident will scarcely occur, if the cyst is carefully punctured, and due caution used in securing the opening by a ligature. We may then proceed to finish the operation.

III.—*What are the legitimate conclusions to be deduced, as to the practicability of the operation, upon a review of the subject?*

1. We have ascertained that ovarian dropsy is not so harmless a disease as some imagine; that, in fact, under ordinary treatment, it is very fatal. More than half of the cases recorded, actually die—a large proportion of the others are reported only to be relieved—and only one in five recover.

2. That not only is it fatal, but that it is much more rapidly fatal than is generally supposed. The tables show that more than one-half, or sixty-three in 124, patients, die in less than two years; and more than half of these (*viz.*, thirty-eight) died within twelve months from the commencement of the disease.

3. That tapping, which was formerly considered the only mode of palliating the disease, is a very dangerous remedy. In a table composed of thirty cases, fifteen died within four months after the operation, and twelve of the fifteen did not undergo a second tapping. In a table of forty-six cases, collected by Mr. Southam, twenty died after the first tapping. In a table of forty-six cases, collected by Mr. Southam, twenty died after the first tapping. Sixteen of these cases died within one month of the operation, and ten of these sixteen died in seven days after the evacuation of the cyst.

4. Supposing the danger of the first tapping to have been escaped, we find that the fluid re-accumulates rapidly, and that the intervals between the operations become greatly diminished, while the quantity of fluid is increased, so that its remedial powers hardly compensate for the dangers which attend its performance.

5. We must remember that in some cases, paracentesis can be borne frequently, and life can be preserved in a tolerable state of comfort, for many years, under the careful performance of the operation. But these cases are rare, and should be regarded as exceptions to the rule.

6. That the operation of tapping ought only to be performed under one of two circumstances, namely, either early, when the cyst is unilocular, or when the tumor is producing serious pressure upon the vital organs. In no case, except under the latter circumstance, ought a multilocular cyst to be punctured, because the relief given is so trifling, and the dangers of paracentesis are so much increased, in this form of the disease.



7. That medical treatment produces only slight benefit. It may arrest the progress of the disease for some time, but very rarely effects a cure. Pressure as a remedy, prevents the cyst from enlarging rapidly.

8. That ovarian disease sometimes undergoes a spontaneous cure, by the rupture of the cyst, through the agency of ulceration, and the discharge of its contents into various outlets of the body.

9. That from the difficulty of curing the disease by the usual modes of treatment, the operation of the extraction of the cyst has been proposed, and performed nearly three hundred times, with average mortality of twenty-five per cent.

10. That in these three hundred operations, more than sixty, or about *one in five*, were unfinished, either from the extent of adhesions—from the tumor being uterine or omental—or from the fact that no tumor existed; proving, most indisputably, the great difficulty of correct diagnosis.

11. That the diagnosis is very obscure, as regards adhesions, and the character of the tumor; that adhesions existed in forty-six of eighty-one cases, and in six of the eighty-one there was no tumor.

12. That the mortality of the operation was greater where adhesions were present, than where they were absent.

13. That the disease is often complicated with organic disease of other viscera.

14. That the principal recorded *causes* of death, where it took place soon after the operation, are hemorrhage and peritonitis; but the cases are too few to be relied upon.

15. That when death takes place in consequence of the operation, it is very rapid. Of thirty patients, where time is mentioned, fourteen died within thirty-six hours, and twenty-five within a week.

16. That the character of the disease is of importance with regard to the mortality. In the extraction of hard tumors of the ovary, the mortality was more than fifty per cent.; while in those cases where the tumor was composed partly of fluid, and partly of solid matter, the mortality was less than thirty-three per cent. We conclude, therefore, that encysted tumors are much more favorable to the operation than hard or fibrous tumors.

17. That the mortality of the major operation is considerably greater than that of the minor section.

18. That in some cases the tumor is malignant; but that encysted dropsy is not, in the ordinary sense of the term, malignant, and that it may be removed without any tendency to malignant disease appearing subsequently in the pedicle.

CONCLUDING REMARKS.—We have now, so far as our limited researches will permit, placed the subject of Ovariectomy in its proper position; we have, without any bias for, or prejudice against the operation, exhibited the results as derived from reading and experience. We have endeavored to show that paracentesis and the ordinary modes of treatment, are unsatisfactory in their results, and only to be relied upon as palliative measures. And we have proved that Gastrotomy, or the excision of the cyst, affords the most rational ground of hope for a permanent cure; but whether this, or some other mode of treatment, will supersede the palliative measures, the general sentiment of the profession must decide. If a conscientious statement of principles and facts, will aid in bringing about this decision, we shall feel greatly rewarded for the

labor bestowed upon this subject. Let those, whose position entitles them to give law to the profession, either allow that this operation is justifiable, or that it is not. If the results of its performance prove it to be legitimate, we may proudly boast the possession of another remedy for the alleviation of suffering humanity; but if not, then let all the powers of an enlightened profession be exerted to destroy this means of evil.

In the majority of cases which came under notice, it is our opinion, deliberately formed, that the operation is most decidedly unjustifiable. In encysted tumor, which has enlarged to such an extent as to demand active interference, or, when a unilocular cyst has been under treatment for some time, and is becoming multilocular by the addition of secondary or tertiary cysts upon its inner surface, then the operation is to be proposed and performed.

In such cases, if the diagnosis is clear; if it is believed that adhesions are absent, after the symptoms already pointed out have been intelligibly inquired of; and if the health of the patient is good, the surgeon is bound to extend to her the last aid of his art, and remove a tumor, which if allowed to remain, tends inevitably to her destruction. He should, however, first carefully and honestly, lay before the patient the dangers she must undergo; he should inspire her confidence by the relation of cases of successful extirpation; but he should, also, inform her of those less fortunate. He will thus acquire a confidence, which will be found very useful in the after-treatment, and upon which may depend the favorable result of the operation. If the cyst is single and uncomplicated with fibrous matter,—if the powers of life are active, and the spirits buoyant,—if the operator is skillful, and the after-treatment carefully attended to,—a successful issue may be anticipated.

Ovariectomy, however, is an operation which ought to be sought after. If it is to be the means of introducing surgeons into notice, it will be fearfully abused. We have known at least two operators, who devoted a large portion of their time to visiting various parts of the country, seeking cases, and operating upon all, almost, indiscriminately. We have reason to believe that they are ignorant alike of the anatomical relations of the disease, and its diagnostic character; and yet their reprehensible adventures in surgery, have been blazoned in the village newspapers, and may ultimately find their way into the eastern medical journals. Such unprincipled charlatans should receive no "quarter" from the regular profession; their conduct deserves and should receive the unmitigated scorn of all honorable men.

The treatment after the operation is of great importance, as upon it very greatly depends the success of the operation. The plan of Dr. F. Bird—and he is one of the most successful operators—is a very simple but efficacious one. Its object is to place the skin in such a situation as to enable him at any time after the operation to cause profuse sweating. This is to be accomplished by elevating the temperature, and causing the patient to eat a considerable portion of ice; this at once produces free perspiration, and the patient is placed in comparative safety. If, however, pain in the abdomen comes on, the pulse becomes quick, and the moisture of the skin less; he again produces a higher temperature, giving ice, and continues to do so until the perspiration returns. The patient requires constant watching, and she ought not to be left for many days. The urine should be drawn off with the catheter, when not voided

regularly; the bowels should be left undisturbed for several days, and then moved by enemata rather than by cathartic medicines. The diet must be restricted to toast, tea, rice and barley water, etc.

Before closing, we again urge that medical treatment should have a fair trial; for we should remember that this, and most other surgical operations, are the result of a deficiency in the *ars medicina*, and that the knife should be avoided in all cases where it is possible. That surgeon will be regarded as the greatest benefactor of the profession and the world, who will suggest some method by which the disease can be cured, without resorting to the terrible and hazardous operation of the excision of the cyst.—*Cincinnati Medical Observer*.

*Translations from Foreign Journals.* By CH. F. J. LEHLBACH, M. D.,  
Newark, N. J.

Jules Rochard concludes a treatise "*On the influence of sea voyages and the residence in warm countries upon the course of pulmonary phthisis*" by the following propositions: 1. Sea voyages hasten the development of pulmonary tuberculosis much more frequently than the contrary. 2. Pulmonary tuberculosis is more frequent in the navy, than in the army. 3. With rare exceptions, phthisis progresses more rapidly on ship-board than on land. 4. Young men, predisposed to tuberculosis, should not be admitted into the navy. 5. In tuberculous persons sea voyages are only advantageous, if they live on board under *special dietetic* relations, and if they are enabled to change climate and locality according to the seasons of the year and atmospheric conditions; all this is easier accomplished on land. 6. Hot countries generally exercise a deleterious influence upon the course of tuberculosis, and accelerate it. 7. This is especially true of tropical countries. 8. Even warm countries beyond the tropics are injurious to the majority of tuberculous persons. But few localities are exceptions to this rule, by virtue of their local relations. Residence in such localities protects the patient from acute affections of the respiratory organs, which is a great desideratum in the first stage of phthisis.—*Gaz. Méd. de Paris, Médic. Neuigk*.

*Bromine and bromate of potash*, in the treatment of pseudo-membranous affections, is highly spoken of in the *Journal des Connaiss Méd.*, 1856. A series of cases is adduced which we give in a short extract: 1. A child, aged five years, suffered from a severe angina; cauterization with nitrate of silver and hydrochloric acid proved insufficient; on the 16th day croup symptoms were added; under the use of bromine the child recovered in six days. 2. A young man æt. 26, was attacked with malignant angina; argenti nitrici had been used but without success; several paroxysms of suffocation had already occurred. On the 5th day of his sickness bromine was used, a marked amelioration took place on the next day, and on the 14th day he was convalescent. 3. A girl, æt. 9 years, was treated with bromine on the second day of an attack of angina; on the fifth day she was convalescent. 4. A woman, æt. 30

years, who after confinement was taken sick with puerperal mania and angina, was very rapidly restored by bromine. 5. A case of angina, in a man, aged 32, complicated with gangrene of the mucous membrane of the mouth, terminated in recovery under the use of bromine. 6. The same result was obtained in a young woman æt. 21, who was attacked with scarlet fever and gangrenous sore throat. 7. Similar favorable results were obtained in several cases of croup.—*Medic. Neuigk.*

*The Effects of Caffein upon the Animal System.*—Dr. Stuhlmann, of Friedewald, has performed many experiments with this substance upon animals, and comes to the following conclusions: Caffein is a *poison* and not a nutrient, as Liebig has asserted. 2. Caffein applied to such parts of the body, most proper, produces the death of various animals in relatively small doses. 3. This substance acts as a poison, not by decomposing the blood, but by causing paralysis, when it comes in contact with the nervous system. 4. The symptoms and phenomena, which caffein produces in animals, differ according to the dose. The mode of its administration or application, and the impressibility of the animals experimented upon. (We expect shortly to hear one of the moralizing, anathematizing, fulminating and reverberating sermons of Dr. Dixon's "scalpel" on this subject. Meanwhile, we shall continue to take our regular sip.—*Transl.*)—*Ibid.*

*Sudden Death from Rupture of the Spleen.*—A case of this kind (one of the rarities in medical practice) occurring during a paroxysm of intermittent fever, is related by Dr. Roser in the *Wiener Medic Wochensch.* "J. B., aged 42 years, a well digger, strong built, never sick since childhood, had been attacked for the first time two years ago with intermittent fever, which did not yield to the usual remedy, pepper in brandy, which arrested the disease. The cold stages in these attacks are said to have been exceedingly violent, the aid of several men being sometimes required to prevent his falling out of bed. Toward the end of September, 1856, after he had been occupied for some time in cleaning a deep pond in a marshy district, he was again seized with the intermittent, accompanied by vomiting, etc., and violent stretching pains in the left side. The cold stage generally lasted from 6–8 hours. On the 25th of the next month (October), during a violent paroxysm, he suddenly tumbled out of bed, uttered a shriek, sustained himself for a few moments upon his feet, then sank on the floor and expired. I found marked pallor and coldness of the whole body, and enormous distension of the abdomen. Only upon the most urgent requests, I was permitted to open the abdominal cavity, 36 hours after death. On opening the abdomen, a mass of dark, thickish blood welled forth, which amounted probably to 4–5 pounds. The spleen was ruptured almost in its middle, and the lower portion hanging down somewhat, though not completely separated. After being washed off, it weighed 1 pound 12½ ounces; its length was 9¾, its breadth 4½ inches;" its thickness could not be exactly determined on account of softening. The liver and the rest of the abdominal organs, were, strange to say, normal, the gall-bladder empty. Examination of thorax and brain was not permitted.—*Medic. Neuigk.*

In connection with this case the translator thinks it not out of place to mention *A Case of Pernicious Intermittent Fever.*—On April, 1856, I made in conjunction with Dr. G. S. Ward, of this city, a *post-mortem* examination of the body of Ellen Gilroy, aged 5 years. Up to August, he had been a very healthy child. At that time her parents re-

moved into a very malarious portion of one of our suburbs, where they have lived since. About 3-5 months ago Ellen had suffered from an active attack of intermittent. Her mother procured her some quinine, which broke up the fever. On Sunday, April 13th, she was again seized with a chill and subsequent fever. On Monday she was well. Tuesday morning at about 9½ o'clock, after she had been playing with other children in the street, she was again seized with a chill and went to bed. After a little while (20-30 minutes) her mother, engaged about the room, heard a feeble moan, and found her lying on the face. In a few moments the child, apparently unconscious, expired.

*Obduction*, 6 hours P. M.; marble-whiteness over the face and body, lips livid; no suffusion of eyes or face, no foam at the mouth or nose. *Abdomen*: great engorgement of all abdominal viscera, especially the *spleen* and liver. The former weighed 14 ounces, its longitudinal diameter was 6½ inches; transversely it measured 4 inches, was rather more friable than usual. No structural change of any organ could be observed. *Thoracic cavity*: Organs normal. *Brain*: examination not permitted. —*Medical & Surgical Reporter.*

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*A Case of Excision of the Hip Joint for Morbus Coxarius, with remarks upon the propriety of such an operation, and a summary account of the recorded cases up to the present time.* By R. A. KINLOCH, M. D., Surgeon to the Roper Hospital, and Lecturer on Surgery in the Charleston Summer Medical Institute.

John McAllen, a native of Ireland, aged twenty, a laborer by occupation, was admitted into the Roper Hospital on the 2d of April, 1856. Two years previous he began to suffer from vague, undefined pain about the lumbar region and the hip joint of the right side. From time to time he had been compelled to lie up for a short period, but never, until nine months ago, had he been sufficiently unwell to be obliged to give up his usual avocations. More lately his attention had been attracted by a decided swelling beginning to manifest itself upon the front of his thigh. This had gone on increasing for several weeks, until it had attained its present volume. There was also a disposition, lately, for the thigh to become flexed upon the pelvis, and now the limb could not be entirely straightened. Upon examination of the patient, who was emaciated and presented a marked scrofulous appearance, I found a large fluctuating swelling, evidently sub-fascial, occupying nearly the whole anterior part of the middle third of the right thigh. The thigh was slightly flexed upon the pelvis, and the knee and foot turned a little in; the limb, generally, was emaciated. There was likewise a small swelling over the nates, behind and lower than the trochanter: this, like the larger swelling, did not in any way disappear on pressure. The swelling upon the thigh was what had given the patient most anxiety, and induced him to come to the hospital. He only wanted something done for this, as he felt well enough, as yet, to go about, and for aught else

would not have been disposed to lie up. The diagnosis was at once made out as *Morbus Coxarius*. The swellings were considered to be chronic abscesses, but at first I could not determine if they communicated with the joint. The disease of the joint did not seem to have progressed very far, as the patient walked very regular, and the joint appeared very well: no grating could be discovered on manipulation, nor did extensive movement give much pain. I delayed opening the abscesses for several days, in order to watch a little the constitutional power of my patient, and further, too, to have my diagnosis more certain. I prescribed for him cod liver oil ℥ss. with wine ℥ij., three times a day, and an anodyne at night. April 10th, the abscess of the thigh having materially increased in size, and the patient complaining of the feeling of tension, I made a kind of valvular opening at the dependant part, on the outer side of the sartorius muscle, and evacuated a large quantity of thin pus. April 22d I punctured the abscess over the nates, and, subsequently to this, both abscesses having refilled, were again opened on several occasions. May 4th, distinct fluctuation was discoverable higher up, behind the trochanter. A puncture was made here, and considerable pus flowed away, mixed, it appeared, with synovial fluid. Consequent upon this, there supervened considerable irritative fever, with gastric disturbance and great restlessness. The oil was now discontinued, and p. gum opii, gr. j., with a glass of wine, given every three hours. The distressing symptoms were modified after a couple of days, and the opium was then only given at bed time. The discharge from the last abscess was now very copious and offensive. I had expressed a gloomy prognosis to some friends of the patient, and on this account I was applied to, on May 10th, to give him a discharge from the hospital, his friends preferring that he should die at home. At their earnest solicitation, a few days after, I consented to visit him privately. At the expiration of a few days, I was much pleased to notice that a decided improvement had taken place under a free allowance of good wine, with nourishing diet, and opiates given when required. The discharge, though, continued profuse, and there were many evidences of extensive disease of the joint. Once or twice, when at the hospital, he heard me say something about dead bone and the persistence of the discharge. He now wanted to know if I could not in any way take out the dead bone, saying that he would submit to any operation that promised success. Eight or ten days elapsed, and finding that the discharge was as profuse as ever, moreover that ugly bed-sores were about appearing, I began to think that excision of the joint might offer a little chance. He seemed strong enough to stand an operation quickly performed, and this appeared the only alternative left. I then fairly stated to him my opinion, and told him how slight a chance the operation afforded; that it might hasten his end. He decided that the attempt should be made. I assumed the responsibility; but I determined that first I would explore the condition of the joint by making a free opening upon it through the cavity of a large abscess, just above the trochanter, and over the head of the femur. To open this abscess freely, I conceived to be proper practice, even though I did not intend to resect the joint. It would be but the carrying out the improved plan of Mr Gay for treating suppurating joints. If the capsule of the joint was found open, and the head of the bone caried, then I would proceed to resect. Previous to com-

menacing my incisions, I had decided, by the test of Nélaton, that the head of the femur was still in the acetabulum. On the 31st May, 1856, my patient having been brought under the influence of ether, (I used ether then instead of chloroform for the first and last time, at the suggestion of a friend; the patient took fully a pound before he became affected,) was turned slightly upon the left side, and held in that position by assistants. I then thrust the point of a small amputating knife a little in front of the base of the trochanter, and carrying it upwards and outwards, and then downwards and backwards, formed a semilunar incision encircling the trochanter, and consequently had a sort of semilunar flap with the convexity upwards. The knife went easily through the walls of the abscess alluded to above, and exposed its entire cavity. The finger passed in, and to the bottom of the wound, discovered plainly considerable destruction of the capsule of the joint, and also the head of the bone, still in the acetabulum, but quite rough, and partially destroyed by caries; the brim of the acetabulum, too, could be felt considerably diseased. Under these circumstances, I conceived it best to proceed and resect the head of the femur. The point of the knife was accordingly passed across the portions of the capsule yet entire. My assistant then flexed and adducted the thigh, and the round ligament not holding, the head was thrown out of the cavity, and then forced as much as possible through the external wound. I next passed the chain-saw behind the head and neck, and quickly divided the bone above the trochanters. Proceeding to examine the acetabulum, I was shocked at the extent of the disease. The brim was rough and crumbling, and there was an extensive perforation of the floor. With the gouge forceps I took away some portions of the brim, but soon desisted, as I felt it impossible to take away anything like the whole of the diseased structures. The wound was brought together by a few sutures, the lower end only kept open by a little lint to facilitate the exit of the discharge, the patient removed to bed, and the limb extended and kept steady by pillows. Not reacting as well as I desired, I ordered brandy freely until my afternoon visit, also a full dose of opium. In the afternoon his condition seemed better; he had warmth of skin and a fair pulse. The brandy was continued according to the indication during the night, but upon my morning visit I was sorry to discover a greater disposition to collapse. From this time he refused to respond to the most active internal and external stimulation, but sank and died, not quite thirty hours after the operation. I was not able to examine the body after death.

*Remarks.*—One of the prominent features of modern surgery is its conservatism. This is especially evidenced by the number of operations now performed for the excision of joints, in consequence either of injuries or diseases which formerly seemed to necessitate amputation. We may say now, with reference to the joints of the upper extremity, that good surgery always calls for excision, where amputation is the only alternative. Even though excision should offer a little more risk to life—which, however, cannot be affirmed—it is rendered attractive and preferable when we think of the advantages of possessing a useful member. With the larger joints of the lower extremity, the rule of practice is not so strikingly clear nor so certainly fixed; or, at any rate, there exists more controversy as to the expediency of excision in injuries and diseases of these structures. To decide correctly, it is evident that truth

must be elicited on two important points : on the comparative danger to life from amputation, and from excision, and the utility of the limb after successful excision, when compared to an artificial substitute. To determine these points, the excisions of the several joints must be considered separately, and compared with the several amputations which in practice may become their substitutes. Thus, with regard to the hip joint, the excision must be contrasted with the amputation through the joint ; while with the knee and ankle joints, the excisions are to be contrasted with amputations of the thigh and leg. It will be perceived, then, that the question is not precisely the same with regard to the three large joints of the lower extremity. When considering amputation or excision of the hip joint, we must decide, first, which of the two operations offers less risk to life ; and, secondly, the probable usefulness of the limb after excision. We cannot well speak of the utility of the member as compared with a substitute, because no contrivance that we know of is worthy of such a name. We have only to consider whether the limb, after even successful excision, is not worse than useless—is not a positive incumbrance. If it be an incumbrance, the merits of excision of the joint would have to rest upon its claim of occasioning less danger to life. If such claims could not be substantiated, then excision would be bad surgery ; amputation would be correct practice. But as to the excision of the knee and ankle joints, the danger of these, as compared with the respective amputations of the thigh and leg, must first be weighed, and then a decision must be further founded upon the known usefulness of the limb, in each case, after successful excision, as contrasted with its usefulness after successful amputation, when there has been provided an artificial leg or foot.

These are the two prominent questions, when considering the propriety of excisions of the hip, knee, or other joints, as substitutes for amputation. But it must not be forgotten that there is another question of paramount importance which comes up in many cases of diseased joints, viz. : the propriety of resorting to any operative procedure. This is the first question to be determined, when we have to deal with diseases of the joints considered constitutional in their character ; or when, along with the diseased joint, we have functional or organic disease of some important organ. The rule of surgery is very plain as to the latter contingency. Very rarely would an amputation or excision, of the kind we are considering, be a justifiable procedure in a patient with diseased lungs or kidneys. But the rule is perhaps not so fixed in reference to the first contingency. In regarding the topical manifestation, we may be directed back to some general disease, some abnormal *blood crisis*. There may be some practitioners who, carried away with a transcendental humoralism, look only to this, and can see no philosophy in active local interference. Others—and we must think these the more rational—cannot see why the common rules of surgery should be departed from, when dealing with the effects of the disease in a particular texture, because the local changes may be obscurely traceable to faults in the general nutrition ; admitting the *blood crisis*, they cannot, on this account, forget that the local affection may be the source of increased potency to the general disease, and likewise that it may be indubitably progressive.

How are we to discover truth in reference to these debatable points ?



To reason *à priori*, we may approximate it, by applying the common principles of surgical science, of analogy, and of common sense; but to reach it definitely, we must be guided by experience alone—we must lean upon the solid basis of statistical data.

First, then, to glance at these principles, and then at the statistical data, so far as this may bear upon the propriety of excision of the hip joint in "*Morbus Coxarius*." The pathology of this affection I will say, in a few words, is scrofulous caries, beginning, in the greater portion of cases, in the head of the femur, and attended, sooner or later, where disease progresses, with destructive ulceration of the cartilages and the ligamentous tissue of the joint, going on finally to caries of the floor and brim of the acetabulum, and the formation of abscesses about the joint, which may at last communicate externally, and in some instances even open within the pelvis. The progress of the disease may be in one of several directions. Sometimes it is favorable, a limit taking place to the destructive process, successful attempt at new ossific production, with gradual cessation of the discharge results, the joint becoming ankylosed; or a further destructive progress may have first eventuated in the displacement of the head of the bone from its proper cavity, and its subsequent fixation upon the ilium, the acetabulum recovering from disease; or, lastly, an actual separation of the caried head of the femur from the shaft, and its subsequent exfoliation, may prove the beginning of a hopeful result. At other times, the progress is in the more fearful direction: the patient becomes worn out, and dies from hectic, the local disease having extended its ravages, and the abnormal *blood crasis* having become more confirmed; often, too, other and more important organs have suffered from destructive disease.

Now, in regard to the treatment of such an affection, the principles of surgery should be clear and determined. The general *blood crasis* must be corrected, if possible, and its morbid local manifestation controlled. The means for fulfilling the first indication will assist in fulfilling the second; but these must not be relied on alone; general and local treatment must go together. The kind of local treatment, however, must be determined, in a great measure, by the degree of progress the disease has made. In the early stages, the local treatment might have for its paramount object the controlling of increased local vascular excitement; but at a later period the indication is not so simple—for we have to deal with superadded sources of disease, in the shape of purulent accumulation, and dead cartilage and bone. The principles of surgery, now, would seem to call for more active local interference—for we know of but one way of dealing with dead bone: *it must be removed—for it is, to all intents and purposes, a foreign body*. We hesitate not to carry out this principle in caries or necrosis attacking most other parts of the skeleton, whether connected or not with strumous disease. The indication is ever the same, and we should refrain from carrying it out only where the operative procedure necessary for so doing would be almost certainly destructive of life, as in the caries of the spinal column, for example.

Does the operative procedure for the removal of the necrosed bone, in "Hip Disease," involve an amount of risk sufficient to deter us from resorting to it? I will answer this hereafter.

The same kind of *blood crasis* often presents us with local diseased

manifestations in other structures and organs : in the lymphatic glands, the breast, the testicle. If disease progresses far enough in these organs to threaten life by hectic, in consequence of the wasting discharge and the irritative action engendered and kept up by the presence of diseased, weak, and dying tissues, does any principle of surgery advise against operative interference because of scrofulosis? I think not. May I not, then, make bold to say, that the principles of science, analogy, and common sense, offer no objection to surgical interference in the disease under consideration, but rather urge its propriety?

If we appeal in the same direction for a decision as to the choice of the two operations above referred to, there would seem to be even less room for disputation here than there is with the previous question. The important parts necessarily cut through in amputation, the degree of shock resulting, the extent of the wound made by the procedure, enable us at once to pronounce upon the likelihood of a much greater attendant fatality than would follow the comparatively small operation of excision.

For information as to the utility of the limb after successful excision, we can assuredly rely upon experience alone. The result of this experience I will show in presenting the statistical data, and then, too, we shall see what reliance can be placed upon the conclusions already arrived at by *a priori* reasoning.

Mr. Charles White, of England, in 1769, seems to have first suggested the excision of the Hip Joint; he, however, never practiced the operation. Schmalz, a Saxon surgeon, in 1816, first removed the head of the femur for "Morbus Coxarius". He did not, though, practice resection of the bone, for the head was found already separated from the neck; nevertheless, his operation is justly made to rank under this head. In England, the operation was first performed by Mr. Anthony White, in 1818; and it attracted much attention because of its novelty and its successful result. Mr. Hewson, of Dublin, repeated the operation in 1823, and Sir Benjamin Brodie in 1836. Besides Sir B. Brodie's case, we find, after Howson's, an account of some seven operations by Heim, Schlitching, Kluge, Vogel, and Textor. The operation, however, passed into a kind of oblivion, until Mr. Fergusson, in 1845, lent it the authority of his distinguished name. He deserves the credit of reviving it in Great Britain, for it has since been practiced by many of the best surgeons in the metropolis of England, and has there become a recognized procedure. Elsewhere it has been little resorted to.—*Charleston Medical Journal & Review*.

## EDITORIAL AND MISCELLANEOUS.

## A TRIP TO TENNESSEE.

It was our privilege to attend the recent celebration of the completion of the Memphis & Charleston Railroad, in the City of Memphis, from which place, we proceeded to Nashville, as a delegate to the American Medical Association, and have very rarely had altogether so pleasant a visit anywhere, as this, to the noble State of Tennessee. Memphis is rapidly becoming one, of the most important cities in the West, and with the energy, enterprise, and expanded views prevailing there, it is difficult to put a limit upon the prospects of the city; with all our hearts, we say, may they realize all and even more than they anticipate,—by the way, we hope to see the Medical College of that city, keeping pace in growth and prosperity with the other interests, and indeed we know but few points better located for a Medical School, than this, and hope soon to see the talent and science belonging to the Faculty fully rewarded. Long shall we remember the public, and especially the *private* hospitality of the City of Memphis.

As before intimated, from Memphis, we proceeded to Nashville, to attend the meeting of the American Medical Association, which convened in that city on the 5th of May; and here again, we should be ungrateful indeed, and utterly dead to all the more honorable and elevated emotions, if we had failed to be responsive to the generous, and we may say magnificent entertainment of the members of the Association by the "City of Rocks;" and upon the whole, we have returned to our homes, fully convinced that the people of Tennessee are a noble and generous hearted race, and do every thing upon a large scale; and we doubt exceedingly whether there is a place in the Union, where a more elegant and profuse hospitality can be found than in the City of Nashville; and it would appear that the Science of Medicine must be more highly appreciated there than we usually find it elsewhere, as the citizens generally seemed to vie with the medical men of the

city, in bestowing distinguished attention upon the Association.

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### ATLANTA MEDICAL COLLEGE.

This Institution opened on the 1st Monday in May, with an interesting Introductory, by Prof. J. Boring, which will be found in this number of our Journal; a good class is already in attendance—larger than last year at the same period we are assured by the Dean, whose calculation is, that there will be an increase in the class of 1857, of twenty-five per cent., over that of the last Session.

The facilities for teaching in various ways have been very considerably increased by late additions made to the appliances of the College, upon the return of Prof. Westmoreland from Europe, and the completion and reception of the remainder of the chemical Apparatus.

In addition to this, we have, for the first time, occupied our own building, which is now sufficiently completed for all practical purposes, and is acknowledged by all to be admirably adapted to the purpose for which it was designed—the dissecting room we would particularly mention as most complete, and amply filled, as we are assured, with fine anatomical material, and, altogether, we can say, we think without much boasting, that our arrangements for teaching medicine are not to be despised, if we *do* hold our sessions in the *summer*, to which some are so bitterly opposed.

Notwithstanding what we consider *good* advantages for teaching the Science of Medicine offered by the Atlanta Medical College, we are, as heretofore, *progressive*, and, at a proper time, will doubtless be ready to enter into any practical, feasible and *common sense* extension of facilities and requisitions for graduation, that may be generally adopted. As to the advice we have occasionally received of late (since we have grown up to be worthy of notice) from those who *pretend* to have a higher standard, all we have to say, is, gentlemen, we are very much obliged to you for your kind interest in our welfare, but consider ourselves entitled to the *right*, if not competent to the task of taking care of ourselves, and shall

pursue the course dictated by our sense of right and propriety.


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### SAVANNAH MEDICAL COLLEGE.

Upon our recent trip to the American Medical Association, we had an opportunity of forming the acquaintance of two of the Professors in this Institution, and having been assured, in the most positive manner, that their recent circular was not intended as an attack upon the Atlanta Medical College, we, of course, are willing to give them the benefit of that disclaimer through our columns, and at the same time, would assure them that we are *perfectly willing*, that they should pursue their own course, and regulate the particular policy of their own institution, provided they do not attempt to bring into discredit, in an unfair way, the plan which we (in the exercise of the same right which we accord to others) have thought fit to adopt.

The truth is, we believe those controlling the Savannah College to be gentlemen, and feel rather kindly than otherwise towards the members of the Faculty with whom we have recently become acquainted, and while, from the position which they have thought fit to assume, we can not *possibly* be otherwise than antagonistic, we assure them that we are just as *friendly* as human nature can be expected to be, towards those whose declared policy strikes a blow at the Institution with which we are connected. While we have, upon a former occasion, in reference to this matter, manifested a different spirit from that which controls us at present (the present mood being the result of assurances, the sincerity of which we could not question) we must nevertheless say, that with the lights then before us, a sense of invaded rights *compelled* us to adopt the course pursued.

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 Proceedings of the American Medical Association in our next number. Received through courtesy of Nashville Journal, but too late for publication.

## AMERICAN MEDICAL ASSOCIATION.

From the fact that the number of delegates in attendance at the late meeting of the American Medical Association was nothing like so large as usual, and from the failure upon the part of the more prominent members of the profession, (with a few exceptions) to attend, it would seem that there is a waning interest in its deliberations.

The truth is, the practical working of this body clearly convinces us that elements have already been introduced into its operations, which will finally scatter it to the winds, unless more wisdom and less ambition is found in its future proceedings. As a social "re-union," and as an occasion for the presentation of contributions to science, and as an organized arrangement for the diffusion of these treasures, it has our *heartly good will*; but as an instrument for the elevation of a favored few, and as affording an opportunity for an annual volley of abuse of the medical Colleges, from disappointed aspirants for Professors' chairs, it shall ever have our *heartly condemnation*. We must confess ourselves really sick of this eternal cry about the inferiority of the medical profession of the United States. Our doctrine (and we have no hesitation in stating it) is, that the medical men of this country are fully as good as the people *deserve*, or are willing to *pay for*, and with fully as large a share of practical skill in the treatment of disease, (belonging to their country) as can be found upon the globe.

In saying this much, we do not mean to be understood as contending for the position, that the system of American Medical education is the best in the world; but we do contend, that in the present condition of this country, you cannot support a system of a much more expensive and extended character than the present, for while it is true that many graduate and commence practice who are but indifferently prepared, they generally settle in communities who would not or could not remunerate a medical man, who had spent double or treble the time in fitting himself for his profession.

Some, more fastidious than wise, may object to the ~~money~~ view of the subject, but in this country, with the innumerable avenues to wealth, you will not find men devoting much ~~time~~ money to a profession—attended at best with so many sac-

rifices—and affording no adequate return, in its revenue, for what has been expended upon it—this *we know* to be the fact, the prating of would-be, and over-wise *reformers*, to the contrary notwithstanding, which especially comes with a bad grace from those who are in a position to “offer medical education, without money and without price.”

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#### UNIVERSITY OF NASHVILLE.

In the last number of our Journal, we intimated that an impression existed upon our part, that the Faculty of the Nashville School had acted in bad faith towards the Atlanta Medical College, in requiring the withdrawal of Prof. Buchanan, from the position which he occupied in the latter institution.

At a recent conference, however, with some of the gentlemen connected with the Nashville College, we have had facts and assurances satisfactorily supplied, which enable us to relieve *the Faculty*, from the imputation of any improper motive or dishonorable intention in connection with that matter.

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#### BOOKS, &C., RECEIVED.

We have received from the publishers, Messrs. Blanchard & Lea, of Philadelphia, through Messrs. J. J. Richards & Co., of this city, The Physiological Anatomy and Physiology of Man, by Todd & Bowman, complete in one volume with 298 illustrations,—Ludlow's Medical Examinations—and a new Edition of Churchill on the Diseases of Women, including those of Pregnancy and childbed, revised by the Author, and with notes and additions, by D. Francis Condie, M. D., of Philadelphia, with sundry pamphlets, &c., which will be reviewed in the next number of our Journal, our engagements being of such a character that it is impossible to do them justice at present.

In this connection, we would remark, that books may be sent to us, through Messrs. J. J. Richards & Co., of Atlanta, whose establishment we would recommend to our friends as

offering inducements in the way of *supply* and *terms* upon which their books are offered.

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*Address of C. K. WINSTON, M. D., Chairman of the Committee of Arrangements, for the American Medical Association, on behalf of the Committee, and of the Medical Profession of Nashville.*

MR. PRESIDENT AND GENTLEMEN OF THE AMERICAN MEDICAL ASSOCIATION:—This, I believe, is the Tenth Annual meeting of this Association. As chairman of the Committee of Arrangements and Reception, I am charged with the agreeable duty of welcoming you to the State of Tennessee and the City of Nashville. I regret that I have not language to express this sentiment with sufficient cordiality. I only add, gentlemen, in common phrase, "You are more than welcome."

You are the representatives of a profession, distinguished alike for its antiquity, its scientific attainments, and its usefulness. It constitutes the true link between science and philanthropy—moral, intellectual and physical. You come from every portion of this glorious republic—from the Kenebec to the Rio Grande—from orange groves and golden sands—from mountains clad in eternal snow, and valleys smiling in perpetual verdure. You come not for purposes of self aggrandizement or personal ambition, nor yet to advance the schemes of parties or stir up the antipathies of sections. "You know no North, no South, no East, no West;" but you come as a company of philanthropists, a band of brethren, that you may pour the acquisitions of another year into a common treasury, kneel side by side at a common altar, and drink the living water as it gushes from a common fountain. You have come to maintain the dignity, to elevate the ensign of a profession, to which you have devoted your lives, and to which you have linked your fortunes.

You are the cultivators of a profession eminently progressive, admitting to the fullest extent the spirit and genius of enterprise. So much may not be so fully said of others. Who could expect at this or any other day, to embellish the Commentaries of Blackstone, or improve the pleadings of Chitty, or re-poise the scales of justice? Where are the men with commissions never so divine, who would attempt to re-cast the logic which made Felix tremble, or adorn the doctrine of justification by faith? Who hopes now to shed additional light on the pathway to the skies, or sing in strains more immortal than the triumphs of the cross? Not so with Medicine. Yours is a rising orb—magnificent in its proportions—while others have reached the zenith, yours has but begun to mount the heavens—while others have begun to fade, yours knows no eclipse nor decline. You revere the names of Hippocrates and Sydenham, of Brown and Cullen, with a host of others; you treasure up their maxims, but you acknowledge no *master*, you fall down at the feet of no *Gamaliel*. You have come to the day of free thought, of free investigation and free speech. You call in question the most hoary, as well as the most recent fact, and you are daily revealing, in floods of light, principles hid from the foundation of the world.



You are eminently the students of nature. While others may be led along dubious by mortal pedagogues, your teacher dwells in the realms of eternal light, and guides with hand unseen and unerring to essences and first causes. The formative chrystal and germinal dot are alike transparent before you. You are taught the mysteries of the living principle; the scalpel and retort are your companions, while you revel in the wonders of the microscopic world. You understand, somewhat, the laws by which a mote or a mountain is formed, a monad or a man is made. The spear of grass which lifts its head in the distant solitude, the lordly oak and imperial cedar, instruct you, while air and earth, and sea, with the creeping multitude yield treasures at your command.

You are the veterans of a thousand battle fields, not in mortal strife where man meets man in sanguinary conflict; but where a secret and impalpable foe—a tyrant who has reigned from Adam till now—disposes his secret forces and directs their deadly shafts. When others have turned back affrighted and aghast, you, single-handed and alone, have met “the pestilence which walketh in the darkness,” and the destruction “which wasteth at noonday,” despoileth them of “the armor wherein they trusted,” and have driven them ignominious, from the field.

Wore the victories which you have won, the conquests which you have achieved known, you would be crowned with laurels more unfading than those which entwined the brows of Greek or Roman conquerers.

But more and better than all, you are the lovers of your race, the friends of humanity. Scattered about all over this happy land, you emphatically “go about doing good.” Your hearts beat in unison with human woe—your ears are open to the cry of distress, whether it come from hovel or palace—you “wipe away the orphan’s tear and cause the widow’s heart to sing for joy,”—upon your heads daily descend “the blessings of those who were ready to perish.”

To such a body of men, thus actuated, thus coming, we extend a cordial welcome. We feel honored by your presence, and expect to be improved and elevated by your intercourse. We throw wide our doors and invite you to the hospitalities of our homes, and to the kindred affections of our hearts.—*Nashville Medical & Surgical Journal.*

*Hydrocele cured by friction of the Tunica Vaginalis.* Reported by E. S. SHARP, M. D., Resident Physician. Prof. GEORGE C. BLACKMAN, Attending Surgeon.

Sebastian Hook, æt. 59, mechanic, of bilious temperament, and regular in his habits; admitted October 17, 1856. About five years before, his scrotum commenced enlarging, which finally increased to a very large size, in the space of two years. After which time the veins of his legs became enlarged, and ulcers formed of considerable dimensions over both tibia. When admitted, his general health was tolerably good. Scrotum much enlarged and fluctuating. Tunica Vaginalis contained probably a pint and a half of fluid. The veins of both

legs were enlarged to three times their normal size, with several ulcers over both tibia. Six weeks after his admission his hydrocele was tapped with a trocar, and the above named amount of fluid evacuated. No injection was used, and instead, friction was employed for a few seconds, by Prof. B., causing no inconvenience to the patient at the time. In a few hours the scrotum appeared much swollen, red and somewhat painful. Ordered cold water dressings and opiates at bed time. The inflammatory process gradually subsided, and in a few days the hydrocele was cured.—*Western Lancet*.

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*Glycerine in Phthisis*.—Professor N. S. Davis in the *Northwestern Medical and Surgical Journal*, says on this subject: "For cases of tubercular disease in its early stage, before the cough is accompanied by much expectoration, we frequently prescribe—

R. Glycerine, ℥ ij.

Iodide of Potassium, ʒ i.

Sulphate of morphine, grs. ij.

Mix, and give one teaspoonful before each meal and at bed time.

If the disease is farther advanced, and expectoration more copious, with rapidly increasing emaciation, we prefer the following—R. Glycerine, ℥ ij; syrup of iodide of iron, ℥ ss; sulphate of morphine, grs. ij. Mix, and give one teaspoonful every four or six hours.

It is now two years since we commenced using the glycerine in the treatment of phthisis, generally combining it with some preparation of Iodine, and just enough morphine to allay cough and promote rest; and we have certainly derived more benefit from it than from any other one remedy.—*St. Louis Medical & Surgical Journal*.

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*Singular Case of Triplets*.—Dr. A. S. McGregor, of Gasconade Ferry, Mo., in a letter to the editor of this journal, says, on the 10th of August, 1856, Mrs. G——, of this county, was delivered of a still born child, twenty-one days after this she gave birth to a second, and in the same length of time thereafter of a third. The two last lived about six hours each. The mother is doing well, and is again pregnant.—*Ibid*.

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*Ill Effects of Quinine*.—Dr. Greenwald, of Cincinnati, reports a case in the *Western Lancet*, in which decided and persistent hemiplegia was produced by the use of quinine. About twenty grains was administered in three doses combined with other remedies. The hemiplegia was preceded by ringing in the ears and a disposition to sleep. This case, with others on record, shows that the administration of quinine is not, under all circumstances, unattended with danger.—*Ibid*.

*William Lawrence.*—This celebrated writer and surgeon, according to the author of the Clinical Reports, published in the *London Lancet*, "is as active and expert in his operations, even those of the most delicate character, at the present time, as in his earlier days." Mr. L. is now over seventy years of age, and we can scarcely credit the above, for we saw him perform many operations during the winter of 1846-7, and were even then often reminded of that saying of Horace: *Multa se nem circumveniunt incommoda*. Mr. Lawrence is probably the most learned surgeon that Great Britain has ever produced.—*Western Lancet*.

### METEOROLOGICAL OBSERVATIONS FOR APRIL, 1867, AT ATLANTA, GA.

| APRIL. | THERMOMETER. |         |         | BAROMETER. |         |         | WIND. | REMARKS.                             |
|--------|--------------|---------|---------|------------|---------|---------|-------|--------------------------------------|
|        | 7 A. M.      | 2 P. M. | 7 P. M. | 7 A. M.    | 2 P. M. | 7 P. M. |       |                                      |
| 1      | 50           | 64      | 52      | 29.77      | 29.75   | 29.70   | S.    | Cloudy—Rain $\frac{1}{2}$ in.        |
| 2      | 40           | 56      | 46      | 29.72      | 29.90   | 29.94   | N. W. | Fair.                                |
| 3      | 36           | 54      | 44      | 30.07      | 30.20   | 30.10   | N. W. | Fair.                                |
| 4      | 44           | 64      | 58      | 30.10      | 30.10   | 30.00   | S.    | Cloudy—Rain 9-16 in.                 |
| 5      | 54           | 60      | 58      | 29.90      | 29.85   | 29.70   | W.    | Drizzly.                             |
| 6      | 28           | 34      | 28      | 29.62      | 29.75   | 29.77   | N. W. | Fair.                                |
| 7      | 28           | 48      | 42      | 29.90      | 30.06   | 30.00   | W.    | Fair.                                |
| 8      | 38           | 62      | 52      | 30.02      | 30.05   | 30.00   | S. W. | Fair.                                |
| 9      | 44           | 44      | 37      | 29.85      | 29.85   | 29.80   | W.    | Cloudy—Rain $\frac{1}{2}$ .          |
| 10     | 34           | 56      | 48      | 29.72      | 29.85   | 29.75   | N. W. | Fair.                                |
| 11     | 42           | 60      | 46      | 29.72      | 29.85   | 29.75   | W.    | Fair.                                |
| 12     | 34           | 38      | 38      | 29.70      | 29.70   | 29.70   | E.    | Cloudy—Rain $\frac{1}{2}$ .          |
| 13     | 34           | 58      | 50      | 29.70      | 29.75   | 29.80   | W.    | Fair.                                |
| 14     | 38           | 48      | 40      | 29.75      | 29.90   | 29.87   | W.    | Cloudy—Drizzly.                      |
| 15     | 42           | 64      | 44      | 29.80      | 29.80   | 29.75   | W.    | Hazy.                                |
| 16     | 38           | 45      | 42      | 29.70      | 29.80   | 29.75   | W.    | Hazy.                                |
| 17     | 48           | 50      | 55      | 29.90      | 29.85   | 29.75   | W.    | Fair.                                |
| 18     | 60           | 70      | 58      | 29.78      | 29.73   | 29.65   | S. W. | Cloudy, Storm, R'n $\frac{3}{4}$ in. |
| 19     | 58           | 44      | 44      | 29.70      | 29.75   | 29.80   | W.    | Cloudy—Rain 8-16.                    |
| 20     | 32           | 60      | 48      | 29.90      | 29.85   | 29.85   | N. W. | Fair.                                |
| 21     | 44           | 64      | 42      | 29.70      | 29.62   | 29.68   | W.    | Hazy—Windy.                          |
| 22     | 38           | 44      | 40      | 29.65      | 29.90   | 29.80   | W.    | Hazy.                                |
| 23     | 32           | 52      | 52      | 29.80      | 29.90   | 29.90   | W.    | Fair.                                |
| 24     | 42           | 48      | 42      | 29.90      | 29.92   | 29.95   | W.    | Fair.                                |
| 25     | 42           | 64      | 58      | 29.92      | 30.05   | 29.91   | W.    | Fair.                                |
| 26     | 50           | 70      | 64      | 29.90      | 29.90   | 29.80   | S.    | Cloudy—Rain $\frac{1}{2}$ .          |
| 27     | 52           | 62      | 54      | 29.80      | 29.90   | 29.90   | N. W. | Flying Clouds.                       |
| 28     | 52           | 70      | 58      | 29.92      | 29.95   | 29.95   | W.    | Hazy.                                |
| 29     | 50           | 68      | 66      | 29.95      | 30.05   | 30.00   | W.    | Fair.                                |
| 30     | 60           | 72      | 66      | 30.08      | 30.08   | 29.95   | N. W. | Fair.                                |

Furnished by

J. G. WESTMORELAND, M. D.

## METEOROLOGICAL OBSERVATIONS FOR MAY, 1857, AT ATLANTA, GA.

| M. | THERMOMETER. |         |         | BAROMETER. |         |         | WIND. | REMARKS.                      |
|----|--------------|---------|---------|------------|---------|---------|-------|-------------------------------|
|    | 7 A. M.      | 2 P. M. | 7 P. M. | 7 A. M.    | 2 P. M. | 7 P. M. |       |                               |
| 1  | 56           | 68      | 64      | 29.90      | 29.90   | 29.90   | E.    | Cloudy—Rain $\frac{1}{2}$ in. |
| 2  | 66           | 72      | 68      | 29.90      | 29.90   | 29.90   | S. W. | Hazy.                         |
| 3  | 60           | 62      | 60      | 29.85      | 29.80   | 29.70   | S. W. | Cloudy—Rain 2.                |
| 4  | 48           | 68      | 62      | 29.80      | 29.75   | 29.75   | S. W. | Cloudy.                       |
| 5  | 48           | 72      | 62      | 29.80      | 30.     | 29.95   | W.    | Fair.                         |
| 6  | 56           | 64      | 52      | 29.90      | 29.90   | 29.85   | N.    | Cloudy—Rain $\frac{1}{2}$ .   |
| 7  | 50           | 68      | 60      | 29.90      | 29.95   | 30.     | S. W. | Fair.                         |
| 8  | 52           | 75      | 60      | 30.08      | 30.18   | 30.18   | W.    | Fair.                         |
| 9  | 68           | 77      | 65      | 30.20      | 30.24   | 30.15   | S. W. | Fair.                         |
| 10 | 58           | 86      | 78      | 30.        | 30.     | 29.95   | W.    | Fair.                         |
| 11 | 55           | 75      | 64      | 29.95      | 30.     | 29.90   | S. W. | Hazy.                         |
| 12 | 56           | 78      | 74      | 29.95      | 30.05   | 30.02   | S. W. | Fair.                         |
| 13 | 60           | 66      | 64      | 30.05      | 30.     | 30.     | S. E. | Cloudy—Drizzly.               |
| 14 | 62           | 78      | 70      | 29.90      | 29.90   | 29.85   | S. E. | Hazy.                         |
| 15 | 60           | 78      | 68      | 29.70      | 29.83   | 29.85   | W.    | Cloudy—Rain $\frac{1}{2}$ .   |
| 16 | 56           | 64      | 60      | 29.83      | 29.85   | 29.90   | N. W. | Hazy.                         |
| 17 | 60           | 64      | 60      | 29.90      | 29.85   | 29.90   | S.    | Cloudy—Rain $\frac{1}{2}$ .   |
| 18 | 50           | 56      | 52      | 29.65      | 29.65   | 29.65   | S. E. | Cloudy—Rain 6-8.              |
| 19 | 48           | 56      | 48      | 29.70      | 29.80   | 29.80   | N. W. | Cloudy.                       |
| 20 | 38           | 50      | 52      | 29.90      | 29.95   | 29.95   | N. W. | Fair.                         |
| 21 | 40           | 62      | 54      | 30.        | 30.     | 30.     | N. W. | Fair.                         |
| 22 | 40           | 70      | 60      | 30.05      | 30.10   | 30.05   | W.    | Fair.                         |
| 23 | 50           | 78      | 64      | 30.05      | 30.15   | 30.10   | W.    | Fair.                         |
| 24 | 60           | 82      | 64      | 30.05      | 30.15   | 30.05   | S. W. | Fair.                         |
| 25 | 64           | 80      | 72      | 30.05      | 30.05   | 30.     | S. W. | Fair.                         |
| 26 | 60           | 70      | 68      | 29.95      | 30.     | 30.     | W.    | Hazy.                         |
| 27 | 60           | 76      | 68      | 29.95      | 30.     | 29.95   | S. W. | Cloudy—Rain 1-16.             |
| 28 | 54           | 78      | 60      | 29.95      | 29.95   | 29.95   | W.    | Fair.                         |
| 29 | 62           | 78      | 70      | 30.        | 29.95   | 29.95   | W.    | Fair.                         |
| 30 | 64           | 84      | 78      | 30.        | 29.95   | 29.95   | W.    | Fair.                         |
| 31 | 70           | 80      | 68      | 30.        | 30.     | 29.90   | W.    | Hazy—Drizzly.                 |

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*Dr. Kane.*—At a recent meeting of the N. Y. Academy of Medicine, Dr. J. W. Francis stated a fact derived from the late Dr. Kane's own lips, "that his greatest weight had been 97 pounds, and that during a portion of his Arctic career, it did not exceed 93 pounds." What a physical conformation to encounter the trials and hardships through which it was his lot to pass!—*Western Lancet.*

# A T L A N T A

## Medical and Surgical Journal.

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[No. 11

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### ORIGINAL COMMUNICATIONS.

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#### ARTICLE I

*An Address delivered in the Atlanta Medical College before the Æsculapian Society. By A. W. GRIGGS, M. D., of Newnan, Georgia, June 18th, 1857.*

GENTLEMEN OF THE ÆSCULAPIAN SOCIETY:—We are proud of the distinguished honor of appearing before you on the present occasion. We are truly happy to witness such demonstrations of interest, manifested by this enlightened body, in subjects which have such prominence in our affections. We are only sorry, that we had not have had more time to have devoted to preparation, in order that we might have at least met your expectations of an address. This evening by association, the pleasant reminiscences of the past, cluster in golden splendor before the enraptured vision. Joy first diffuses her chameleon hues to the delighted spirit, but in a moment more we find ourselves lost in the midst of most melancholy reverie. The fond recollection of friends with whom we were once accustomed to meet in conventions like this, excites us as by a sudden shock from an electrical machine,—but the sad thought, that we will meet with but few of them ever again in life, produces an irresistible depression. But we will not pause here, to indulge such gloomy feelings. For the future claims greater respect than the past. Hereafter is of greater moment to us than heretofore. The sands of life

are fast running—the last dust will soon have fallen and we be called to give an account of our stewardship on earth.

Shall we bury our talent in the sordid clay, or shall we present it to our Lord, both principal and interest? Shall we gaze upon the world in its busy commotion, and pass our precious moments in unprofitable engagements? We must labor. Idleness is incompatible with the duties of both students and practitioners of medicine. So much is to be acquired, that ages upon ages might roll on, and pour their plentiful accumulation into the mighty ocean of knowledge, and yet mysteries would be unexplained, and the most beautiful phenomena would take place in our midst unperceived. So vast is the field of our operation, that hundreds of years will be insufficient time, for the perfect elucidation of many important theories and subjects of medical science. How unreasonable, then, is indolence, when our task is so tremendously great. Among the young and the gay, science generally finds but few admirers—but *here* we are happy to find that many are striving to enter her pearly streets, and stand as watchmen on the heights of her towers. When our eyes are made to behold, here in the rich halls of medical learning, even in our own beloved Atlanta, so many young champions enlisted for life, to do battle in the great cause of philanthropy, new impulses arise, and new energies are created, and thus we are impelled in a direction upward and onward, by the effect of two great forces,—ambition for the success of the medical profession, and a desire to relieve the sufferings of our race everywhere. This, gentlemen, is the place where you can make every preparation to fit you for the mighty theatre of future action; it matters not whether you be called to administer as physicians or to operate as surgeons. You are presented with no inferior advantages—medical science is taught here in all its purity and elegance; your professors are more anxious to instruct you in correct principles, and have you understand them thoroughly, than to gratify any selfish ambition in warping your minds to suit their own peculiar views and opinions; they tender you all the recent improvements in medicine and in surgery. It is yours now to walk in the green pastures of science, and drink the sweet waters of her ever bubbling fountains. You are surrounded on eve-

ry side with examples of energy and enterprise. You breathe the very atmosphere of improvement itself. The wheels of civilization, are bearing you on with electric speed to the goal of perfection. As has been said, it is an age of improvement; "our seas are white with the sails of commerce," our railways and canals intersect the country in every direction.

The humming of spindles and the ringing of anvils are to be heard in nearly every city in the Universe—whilst our rich mines of coal and of copper are furnishing thousands of laborers with employment—by which they support themselves and their families. Improvement after improvement, and discovery after discovery, are constantly being made in the arts and sciences. The expansive power of steam in propelling machinery to which it has been applied, has redounded no less to the cause of education than to the financial interests of the country. Once we were albut strangers in our own land; but with the present facilities for traveling, with comparatively small expenditures of money, we can acquaint ourselves with different sections of both the new and the old world. To-day we may walk in the verdant fallow grounds of the sunny South, and to-morrow, we may nearly reach the frozen lakes of the North. The magneto-electric Telegraph conveying dispatches over land and under ocean, has filled the world with wonder and surprise. The time is at hand when we shall be able to know in a few hours, what is transpiring in the most distant parts of the earth. The electric wires will encircle the terrestrial globe, and then the expeditious communication of news will be easy to every land and every people. Fraternal international intercourse, will be encouraged and established everywhere. Misunderstandings will the more rarely occur, will be the more easily explained, and the more satisfactorily adjusted. But whilst so great improvements are taking place in the rest of the world, what are medicine and surgery doing for themselves? are they lagging behind in the distance? are they relapsing into superstition and idolatry? Have they become unmindful of the high destiny to which they belong. Have they stopped, outstripped by the rest of the world, and given up the chase in despair? No, no! is reverberated from earth to heaven, and the echo fills the immensity of space with its swelling sound. They rise in gran-

der magnificence, and in more lovely proportions than the sun ever glowing in the celestial vault. They shine with more glittering splendor, than the beautiful colors of the Kaleidoscope. Their harmony is more agreeable than could have been the sweet strains of Orpheus' music, when he played at the gates and unlocked the dungeons of hell. Corydon may sing of the beauty of Alexis, and the voluptuous charms of Arethusa may excite the sensual mind; but medicine, clad in her beautiful raiment, will attract us to her bosom forever. She proudly points to her rich trophies, and tells us that they are ours. The star of her glory has come from the east, and to-day is twinkling in the Southern sky. The lofty spires of her temple, pierce the towering clouds of adversity and scatter them broken to the wind. She is pure and lovely where e'er you find her home, whether in the ancient cities of the east or the vine clad bowers of the Floridas. Gentlemen have you ever thought of the superior claims of the medical profession. In my humble opinion, the physician ought to occupy the highest position in the estimation of the people. The gifted son of science, he sacrifices every personal pleasure and every bodily comfort, and ministers to the continual wants of the sick and the afflicted. When he would delight himself in the society of his friends and family, he is called away—in the midst of his conversation. When the Holy sabbath comes and all others lay aside their daily business, he is often not permitted to listen, unmolested for an hour, to the preaching of the gospel of salvation. "Oft in the stillly night," when her sombre curtains veil the world in darkness, "Hallo! hallo!" echoes through his chamber, and he is aroused from sweet sleep, rendered more refreshing by the fatiguing labors of the day. He is exposed to every vicissitude of heat and of cold. Nothing excuses him from duty so long as he is able to ride. Slight circumstances excuse the votaries of other professions, and the people do not think to complain. A thousand perishing souls may be assembled awaiting the coming of a minister to expound the everlasting truths of the bible, and enlighten their benighted minds; but an inclement day, or a sick family would be deemed a sufficient excuse for his non-attendance. The rain may fall in torrents—the tempest may prostrate the forest in wild fury—the lightning's vivid flash may play upon



the bosom of the angry storm, but the philanthropic physician, out-braving the dangers of the conflicting elements, mounts his accustomed horse, and visits patients, who, poverty stricken, can never remunerate him for his services—and yet these voluntary acts of kindness are too often considered matters of compulsion. In this the world is vastly, yea, most egregiously mistaken. The physician, no more than the counsellor at law, is compelled to perform gratuitous service. He is an independent character, and belongs to no one but himself and the profession. Think, for a moment, what would or could the world do without his labor and his knowledge. It is true that sometimes in the absence of epidemics, when the country is comparatively healthy, men forget the past, and say that he is of but little advantage to the people; but when disease begins its ravages in the land, they are the first to employ, and offer their whole estate for relief and restoration. The life of the physician is a life of vexation and trial. He is subject to every imaginable difficulty; being a public man, and surrounded by dishonorable competition, he often feels the blasting, withering breath of slander, threatening his immediate destruction. The sons of illegitimate medicine, have no more effectual way of rising to notice successfully, than by misrepresenting the policy of others. If you oppose the introduction of their quack remedies in the families of your patrons, they charge you with prejudice. To them, gentlemen, I have sworn eternal hostility—I have opened a war of extermination with them, which shall never abate nor subside, so long as a patent pill, powder, or preparation of the kind, can be found in our midst. I thank God, that most of my patrons hold them in as great contempt as I do myself—some time back our village was perfectly infested with these beasts of prey—our citizens have been humbugged so often by such boasting whelps, that the magic-working electric oil, would now go begging in the lowest classes. These fellows can be stopped. Are you not aware, that no person, according to the statutes of this State, can engage in the sale of medicines, unless he be a regular graduate, or licensed by a board of physicians, under the penalty of a fine of five hundred dollars and imprisonment, I believe, in the county jail for the term of three months, for the first offence.

The peddling of patent medicines ought to be a penitentiary crime; for it is by far worse than gambling at *farro*, or any other game at cards. Truth is mighty, and will prevail against them. Their days are numbered whenever the sons of *Æsculapius* turn their musketry among them. They will hunt them in their hiding places, and will find them as they skulk in their secret holes and retreats. Also, we have to conflict with the self-important Botanic, who discourses so eloquently about *Lobelia* and *Capsicum*; the Homeopath, with his pills of oystershells and sugar, talking of infinitesimals; the hydropath, challenging the world, with a great noise about water.

Now, we are satisfied, that if any philosophy exists in the doctrines of these systems, as they are called, it finds its origin in ours. Their advocates are confined to the use of a few remedies, whilst we, gentlemen, make all things which legitimately and honorably belong to medicine, subservient to our purposes, in the relief of pain, and the eradication of disease. We exclude no remedy which properly belongs to the *materia medica*. Why should we be prejudiced against a legal remedy: all we want, is to restore our patient to health. We had as soon that *lobelia* should cure as *calomel*. We had sooner that water should cure than any other remedy in the wide world; but they will not do it. Gentlemen, meet these things fearlessly and boldly. A man of science has but little to dread from a collision with such contemptible quacks, in an enlightened community. Your office is high—your responsibilities great. Conduct yourselves with such propriety as becomes your noble profession. You will soon have to act your parts in the grand drama of life. The janitor's bell will soon call you no more to these delightful seats of the sanctuary. Then it will be yours to smoothe the rugged pathway to the grave; it will be yours to give consolation to the afflicted in body and in spirit, whether they dwell in the carpeted halls of the rich, or in the miserable hovels of the poor. Never forget your position as friend, benefactor, and physician. Ever be kind, amiable, candid, accommodating, and attentive. Strive for the elevation of your profession, and for the maintainance of its honor pure and inviolate; defend its claims with zeal, and study its rising interest as your interest, and as the only safeguard to your future position and eminence in the world.

## ARTICLE II.

*Remarks upon Elephantiasis.* By V. H. TALIAFERRO, M. D.,  
Atlanta, Georgia.

Having had some little experience in the treatment of Elephantiasis, we propose to give you a very short and hastily written article upon that disease. It has received its name from its supposed resemblance to the elephant's leg, and is variously denominated Elephantiasis arabum, Elephantiasis grecorum, Barbadoe's leg, &c., each receiving its appellation from the country in which it is prevalent. Elephantiasis grecorum differs materially from the other varieties of the disease, being described as a tuberculous affection. We propose to treat more particularly of this variety, denominated Elephantiasis arabum. It prevails to a remarkable degree, as an endemic in tropical regions, not being seen elsewhere, only sporadically.

The Etiology, pathology, &c., of the disease seems as yet to have been but little understood. The most generally received opinion is, however, that it commences with inflammation of the lymphatics of the part affected. Our observation does not lead us to the belief, that it is ordinary inflammation of the lymphatic vessels; but, that it is a specific disease, predisposed to, by peculiarity of constitution. If it is ordinary inflammation, we are, at least, unable to relieve it with remedies usually applied to inflammatory affections. The disease most frequently develops itself in the lower extremities, the leg from the foot or ankle, being its most usual seat.

Next in frequency, is the scrotum and superior extremities. No part of the body is supposed to be exempt from the disease.

In its commencement, we have considerable constitutional disturbance of an inflammatory character—the part affected becoming hot, painful and swollen. In two or three days, with or without treatment, these symptoms begin gradually to subside, and, finally, no trace of disease is left, save slight enlargement of the limb, or part affected. Aside from this enlargement, the patient is apparently free from disease, which is certainly not the course of ordinary inflammation of the

lymphatics, or other system of vessels. In the course of a month or six weeks, the patient is again seized with a paroxysm, similar, in every particular, to the first, with the exception of the increased enlargement of the affected part. The subject of this disease, as before stated, in the interval of the exacerbations, is apparently free from disease, and hence, the inference of the existence of some specific cause for the recurrence of the paroxysms. These paroxysms do not recur at stated periods, but sooner or later, the patient is subjected to them, usually, some month, six or eight weeks intervening. After each successive paroxysm, the limb becomes more and more enlarged, until finally, we have the enormous distension, characteristic of the disease. The leg sometimes attains such a size as to become a convenient seat for the patient, when he is weary of carrying about his uncouth burthen.

After the disease has progressed for some considerable length of time, the limb becomes excessively hard and unyielding, the skin thick and scaly, and in some places presents a rugged and fissured appearance, and about the foot and ankle, we have the skin presenting a thick velvety appearance. The writer of an article in Duglison's Cyclopædia thus speaks of the enlargement: "The writer of this article was requested to visit a woman at Galle, who, although only about 26 years old, had both her inferior extremities so much enlarged and deformed, that the back part of the legs rested upon the ground, and projected behind the heel, about 9 or 10 inches. The fissures and interspaces between the projecting and pendulous protuberances had ulcerated, and were discharging a most offensive sanies." The disease is said to be sometimes exceedingly migratory, affecting various parts of the body in quick succession.

The writer of the same article referred to says, "Dr. Musgrave thinks this disease should be termed the migratory inflammation of the lymphatic system. Whatever may be its original seat, the patient is never secure, while the constitutional disturbance exists, from a sudden retrocession to some vital organ, I have seen it in the same case transmitted from the scrotum to the head, from thence, after some hours, descend with the rapidity of lightning to the abdomen; again migrate to the chest, to return, perhaps, to the enlargement,

and prove fatal there; or, under more favorable circumstances, resume its comparatively harmless situation, and run its subsequent course, as if nothing untoward had occurred."

The increased enlargement left after each paroxysm is, doubtless, owing to an effusion of coagulable lymph into the cellular tissue, which renders the limb excessively hard; and from the thickened, rugged, and fissured condition of the skin, almost insensible to external agents. The reason this effusion is not more readily taken up by the absorbents, is probably in consequence of its coagulation, and it may be, from this fact, that ulceration so rarely occurs.

As to the cause of this affection, but little is known. It is, by some, supposed to be produced by the heat of a tropical sun, and from the fact that it prevails endemically, only in tropical regions, the supposition is reasonable, that it acts either as an exciting or predisposing cause.

We think, however, the most plausible theory to be, that the predisposition exists in a peculiar specific diathesis, and its exciting cause, when prevailing as an endemic, tropical heat. We believe that other causes, as injuries, &c., may excite the disease.

As before stated, we believe the predisposing cause to be in constitutional diathesis.

The scrofulous and tuberculous diathesis developes scrofula and consumption in a majority of those exposed for a length of time, to exciting causes. Few escape, who are predisposed to consumption, when exposed to an extreme degree of cold. In Elephantiasis, the reverse exists as regards temperature, the disease being developed, in a majority of those predisposed, by excessive heat, while sporadic cases only occur when not exposed to the usual exciting cause.

We have no doubt, but that the disease may exist from hereditary predisposition, as almost every member of large families have been known to be affected with the disease. I was once told by a physician of experience and medical attainment, that he had treated the disease in a family in which several members were affected, and did not, at that time, know of its existence elsewhere.

In this connection, we will briefly notice a case, which has for the past few months been submitted to our care. William,

negro man, about 35 to 40 years of age, has for the last five or six years, been afflicted with an enlargement of his left leg, which includes the foot and ankle, and extends to the knee joint. The disease commenced in his case, after sustaining a slight injury upon the leg, since which time, according to his own statement, he has been the subject of exacerbations, occurring irregularly, from a month to six or eight weeks intervening. When placed under our care, the enlargement of his leg was enormous, and his foot being implicated in the disease was almost round; the whole presenting really, in many respects, the appearance of the elephant's leg. The skin was rough, rugged and in places deeply fissured. About the foot and ankle it presented a thick velvety appearance. The leg was as hard and unyielding almost, as bone, and its sensibility very greatly obtunded. The patient presented no constitutional disturbance, and was able to do the work of an ordinary hand.

But a few weeks had elapsed, after being submitted to our care, when he was attacked with one of those exacerbations peculiar to the disease, at which time his constitution was greatly disturbed. He had excitement of the circulation, nausea and heat of the skin. The attack came on suddenly and without promontory symptoms. At the time of the exacerbation, his leg was tightly bandaged, and such was the intolerable pain produced by the distension, that it was necessary to remove it. Since that time, the exacerbations continue to recur, every six or eight weeks, but with less severity; each paroxysm seeming to be milder than the preceding, until now, which has been some four months, he is able to retain the bandage, during those periods, and suffers but slight constitutional derangement. This boy, I have learned, has been subject to an immense amount of suffering, both constitutional and local, during these exacerbations; and at one time his other leg swelled to almost the size of the one diseased, which, however, returned to its normal size, after the subsidence of the excitement, and so far as I am informed, has never before or since been affected.

For two or three years, previous to being placed under our care, this boy had been living upon a farm, and his owner informs me, that save the periods of exacerbations, he did the work of an able hand, carrying about his enormous limb with apparent ease and comfort.

During the past four months, this boy has undergone a vigorous treatment, which consists first, in the use of iodine and mercurial ointment to the limb, once or twice a day, applied with considerable friction. This application is made after the limb has been freely bathed with warm water and soap; he is also directed to use frequent ablutions to the whole body.—Twice per day, morning and night, the roller bandage is applied, from the toes to the knee, with considerable force. He wears a shoe made to fit the foot and ankle closely. This constitutes the amount of local treatment.

The constitutional treatment consists principally in the use of Donovan's arsenical solution, administered in doses of from 15 to 18 drops, three times a day in wine glass of water. This remedy is occasionally intermitted for the use of iodide of potassium.

Rest, we are assured, should be strenuously enjoined, but from circumstances, and the extreme difficulty of confining a well negro, so far as feelings are concerned, it has not been enforced. We are at this time much pleased to see that the limb has very much improved, both in reduction of size and in its general appearance. Instead of its being as at first, hard and unyielding, it is now soft and is freely indented, as in anasarca. The skin is now entirely smooth, only at places where it was fissured. From the improvement thus far, we are forced to believe that the limb may be reduced to its natural size.

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### ARTICLE III.

*Supposed Case of Passive Congestion of the Brain, with Effusion.*

By A. A. DAVIS, M. D., of Culpeper County, Va.

On the morning of the 7th of April, I was called to Henry Banks, æt 50, a blacksmith, who had been in bad health for a number of years; found him suffering with severe pain in the epigastric region, sick stomach, &c., caused, as I thought, by a hearty breakfast of fish, dried meats, coffee, &c. On pressure

over the stomach, vomiting was induced, carried only to the emptying of the stomach of its contents; but, on the pain still continuing after vomiting, and his bowels being constipated, with slight twitching of the muscles, I gave him

R<sub>y</sub>—Col. ext. comp., vi grs.

Calomel, v. grs.

Morphine, one-sixth gr.

In a few minutes after swallowing it, the patient was generally convulsed, which soon subsided, but leaving him with stupor, almost to profound coma.

Counter irritation was made by mustard plasters to the whole spine and extremities; the feet placed in warm mustard water; stimulating clysters to be used repeatedly; the coma existing during the day; the pulse becoming feeble and irregular; the skin cool and moist; breathing slow and easy.

7th. 5 P. M.—Patient still comatose; circulation feeble and depressed; pulse 80, soft and feeble; skin cool and moist; bowels had acted well; urine high colored: ordered vesication of the extremities, by means of blistering cerate and hot turpentine; the bowels to be kept open with extract colocyath and calomel.

8th. 7 A. M.—Patient no better; still comatose and depressed; vesicants had acted well; bowels open; in which condition he remained until the

9th. 7 A. M.—Patient shows symptoms of reactions; pulse 80, with more body; skin warm and moist; bowels open; mind wandering, and some restlessness; urine still red: ordered counter irritant to be kept up; but fearing too great reaction, ordered cold applications to be kept to the head.

5 P. M.—Reaction strong; pulse 160, full and strong; skin dry and hot; tongue red and dry; delirious, with desire to get up; bowels opened by injections.

R<sub>y</sub>—Ext. col. comp. xxx. grs.

Calomel xx. grs.

Ipecac x. grs.

M. Pulv. x.; give one *ter die*.

R<sub>y</sub>—Veratrum Viride, v. M. every three hours.

10. 7 A. M.—Patient more rational; pulse 80, soft and full; skin warm and moist; tongue less red, but furred; bowels open; recognizes individuals.



Treatment the same, using vi. M. *Veratrum Viride*.

7 P. M.—Patient still improving; pulse 78, soft and full; skin warm and moist, perspiration.

Treatment the same.

11th. 7 A. M. Patient not so well; pulse 75, hard and chorded; skin dry and hot; tongue red and dry; mind delirious; more stupor; bowels open: on enquiry, found, through misunderstanding, the nurse had omitted the *Veratrum Viride*.

Former treatment to be renewed; fresh vesicants applied.

7 P. M.—Patient better; pulse 70, soft and regular; skin warm and moist; mind more composed; had slept during the day. Continue treatment.

12th. 8 A. M.—Patient still improving; pulse 70, soft and regular; mind clear; pupils susceptible to light, which, until this time, had been contracted. Same treatment.

The patient continuing to improve daily; his mind becoming clear and conversant; appetite improved; secretions healthy, until the morning.

16. 7 A. M.—Patient complains of head ache; pulse 90, strong and full; slight wandering; restless bowels—had not acted the night before; skin dry and hot; throbbing temples; tongue dry and red; unable to pass urine; to be relieved by the catheter.

R<sub>y</sub>—*Oleum Ricini*—to be followed by injection—*Veratrum Viride*, viii. M. every three hours; cups to temples; counter irritants.

5 P. M.—Called in a hurry to see patient; found him convulsed, breathing at intervals, and difficult; skin dry and hot; pupils contracted; tongue dry; bowels had not acted.

R<sub>y</sub>—*Oleum Tiglū*, ii. M. placed on tongue; counter irritants; cups to temples, and all without relief to the patient, he passing into profound coma, perfectly unsusceptible to the action of medicine, gradually declining until the morning of the

19th. 5 A. M.—Patient died convulsed.

[We would suggest to our friends, that their reports of fatal cases would be much more satisfactory, if they would embrace, in details, the *post mortem* developments.—EBS.]

# SELECTIONS.

## *American Medical Association.*

### TENTH ANNUAL SESSION.

NASHVILLE, May 5, 1857.

The Association met at 11 o'clock, in the Representative Hall of the State Capitol, the President, Dr. Zina Pitcher, of Michigan in the chair, and upon his right Dr. W. K. Bowling of Tennessee, one of the Vice-Presidents. Dr. Wm. Brodie of Michigan, and Dr. R. C. Foster of this city, Secretaries, were present.

The meeting having been duly organized, the first business in order was stated by the Chair to be the reception of the report of the Committee of Arrangements.

Dr. C. K. Winston, chairman of the Committee of Arrangements, on behalf of the committee and of the medical profession of the city generally, extended a sincere and cordial welcome to the members of the Association, in a few pertinent and appropriate remarks. [Published in last number.]

Dr. Winston then proposed that the roll of delegates, who had registered their names, should be read. The roll having been called, it appeared that twenty States were represented.

Upon the suggestion of Dr. C. K. Winston, our venerable fellow citizens, Drs. Felix Robertson, John Shelby, and James Overton were made permanent members of the Association.

The following list comprises the names of all delegates, permanent members, and members by invitation, in attendance during the session:

*Connecticut.*—Charles Hooker.

*New Hampshire.*—Adoniram Smalley.

*New York.*—James R. Wood, D. M. Reese, George N. Burwell, Alden March, Samuel St. John.

*New Jersey.*—Richard M. Cooper.

*Pennsylvania.*—R. Dunglison, B. F. Schneck, Casper Wister, P. Cassidy.

*Georgia.*—Henry F. Campbell, C. R. Walton, N. F. Powers, A. Means, Joseph P. Logan, M. H. Oliver, Thomas S. Powell, J. Gordon Howard, R. D. Arnold, George P. Paddleford, Pike Brown, Jesse Boring.

*Alabama.*—G. M. Merriweather, W. P. Reese, A. F. Alexander, S. W. Clanton, W. H. Thornton, P. C. Winn, T. Stith Malone, W. J. Bass, G. D. Norris, J. F. Sowell, J. W. Morris.

*Tennessee.*—Frank A. Ramsey, James Rodgers, R. O. Currey, B. B. Lencir, J. L. C. Johnston, J. M. Boyd, George R. Grant, T. A. Atchison, S. S. Mayfield, J. D. Kelly, T. L. Maddin, J. D. Winston, J. E. Manlove, G. A. J. Mayfield, J. D. Kelley, T. L. Maddin, J. D. Winston, J. E. Manlove, G. A. J. Mayfield, Richard Owen, W. P. Jones, J. P. Ford, Robert C. Foster, John H. Callender, John H. Morton, A. H. Buchanan, James W. Hoyte, N. C. Perkins, J. Berrien Lindsley, C. K.

Winston, Paul F. Eve, W. P. Moore, Milo Smith, Wallace Estill, B. W. Avent, H. H. Clayton, H. M. Whitaker, H. B. Malone, T. M. Woodson, A. B. Ewing, Robert Martin, W. K. Bowling, P. S. Woodward, R. F. Evans, Thomas Lipscomb, M. Ransom, J. A. Long, John M. Watson, W. D. Haggard, John S. Park, D. B. Cliff, T. G. Kennedy, T. R. Jennings, Ira Conwell, J. S. Burford, W. H. Childress, W. A. Chatham, J. F. Town, J. M. Brannock, B. C. Jillson, P. W. Davis, G. F. Smith, W. D. Senter, J. W. McNutt, R. G. P. White, J. P. Epperson, S. L. Wharton, T. C. Murrell.

*Louisiana.*—S. O. Scruggs, Robert A. New, Cornelius Beard, E. D. Fenner.

*Kentucky.*—Samuel Annan, R. W. Gaines, J. B. Flint, J. W. Singleton, R. J. Breckinridge, S. C. Porter, W. S. Chipley, S. M. Bemiss, L. G. Ray, W. A. Atchison, E. G. Davis, L. E. Almon, John T. Fleming, C. P. Mattingby, D. W. Yandell.

*Indiana.*—W. H. Byford, W. W. Hitt, Isaac Mendenhall, T. Bullard, N. Johnson.

*Illinois.*—J. C. H. Hobbs, A. H. Luce, James M. Steel, E. K. Crothers, T. K. Edmiston, W. A. Hillis.

*Missouri.*—S. Pollak, E. S. Fraser, John S. Moore, C. A. Pope.

*Michigan.*—A. B. Palmer, L. G. Robinson, Zina Pitcher, W. Brodie, L. H. Cobb, M. Gunn, Lewis Davenport, P. Cline, M. B. Stebbins.

*Iowa.*—Asa Horr, William Watson, D. L. McGugin, J. C. Hughes.

*Ohio.*—Henry F. Koehne, J. Mosgrove, B. S. Brown, D. Ferris, A. W. Munson.

*Wisconsin.*—Hays McKinley, J. K. Bartlett.

*South Carolina.*—E. R. Henderson, M. S. Moore, R. W. Gibbs, R. S. Bailey.

*Mississippi.*—F. B. Shuford, S. S. Cain, J. T. Lowe.

*Arkansas.*—F. Grundy McGavock.

The President then stated that it was customary to take a recess of fifteen minutes in order that the different State Delegations might appoint a member to serve on the Committee on Nominations, and the Association took a recess accordingly for that purpose.

At the expiration of the recess the Association was called to order, and the State Delegations then reported their choice respectively of delegates to serve on the Nominating Committee, which was constituted as follows:

Connecticut, Charles Hooker; New Hampshire, A. Smalley; Indiana, W. W. Hitt; Wisconsin, J. K. Bartlett; New York, James R. Wood; Michigan, A. B. Palmer; Missouri, J. S. Moore; Illinois, T. K. Edmiston; Kentucky, R. J. Breckinridge; Arkansas, F. G. McGavock; Ohio, B. S. Brown; South Carolina, R. W. Gibbs; Alabama, W. P. Reese; Mississippi, F. B. Shuford; New Jersey, R. M. Cooper; Louisiana, S. O. Scruggs; Pennsylvania, P. Cassidy; Georgia, Thomas S. Powell; Tennessee, J. B. Lindsley; Iowa, Asa Horr.

On motion of Dr. Hooker, of Connecticut, it was resolved that the President, Dr. Pitcher, be now requested to deliver his annual address.

*Address of ZINA FITCHER, M. D., President of the American Medical Association. Delivered on the occasion of the Meeting of the Association in Nashville, May 5th, 1857.*

Assembled as we are here, under the auspices of the medical profession in Tennessee; meeting in presence of the citizens of this beautiful city, honored by representatives from that better part of our creation, who like the Amaranth of Milton, throw their shadows and shed their fragrance o'er the waters of the fount of life; coming as we have in considerable numbers from distant portions of the United States, abandoning for the time being our private engagements, and encountering on our way hither the hazards incident to velocity in locomotion, as if only to enjoy the social amenity and the pleasures of professional re-union, these two questions naturally arise in the minds of those who are merely witnesses of the spectacle presented by our assemblage. "For what purpose is this convocation of physicians? What is there in the nature of their particular pursuit which prompts them thus to relinquish its rewards, to forego the endearments of home, when there is no visible manifestation on their part, of a design to promote those objects which center in self-interest, to advance the purposes of sectarian ambition or political partisanship?"

In the fulfilment of a duty incident to the position which I have had the honor to hold for the past year—a year full of pleasant recollections to myself—I shall, whilst designing in brevity to follow the example of my honored predecessors, attempt an explanation of the phenomenon we may be supposed to present to the mind of an intelligent, but uninitiated observer.

Before entering upon the task I have assigned to myself, I beg you to indulge me one moment, in repeating to the Association my assurances of gratitude for the distinction I have received at its hands, and for the personal manifestations of confidence and the acts of courtesy I have received from many of the individual members, the recollections of which will linger in my memory and lessen the consciousness of my weight of years, on the remainder of my journey down the declivity of life.

The objects for which the Association was formed will ever enlist my warmest sympathies and command my active co-operation. I congratulate you on the happy circumstances by which this anniversary meeting is attended, on the evidences of vigor and the promises of longevity which this Association derives from its annual migrations. God grant that its existence may be prolonged by these annual renewals of its vitality, so long as there are evils for it to reform, or works of beneficence for it to accomplish.

To do what I have proposed satisfactorily to myself, would involve the necessity of showing the relation which medicine has held to the civil authority, to the ecclesiastical power and to the social condition of the people for all time antecedent to this organization. This review would also lead us to consider the relation which free governments bear to letters, to science and the arts; a field too large for us to occupy on the present occasion. We shall endeavor without attempting all this, to present to your view the condition of the profession at the time this organization sprang out of the antecedent chaos, the cause or causes of that condition; whether inherent and incurable, or whether arising from in-

trinsic circumstances, which may be remedied, and whether this remedy is to be found in public authority, or sought for in associated professional influence.

We remark first, that a great and notable law marks and governs all the works of creation. It is typified in the individual mind—in our corporeal functions—in the movements of the race—and in the revolutions of the heavenly hosts—all are subject to this law of periodicity, and this alteration of condition manifests itself even in the domain of disease. We have seasons of activity and repose in the natural as in the moral world; periods of illumination and obscurity—of activity and of rest: in the one case producing day and night, winter and summer, and in the other, those alternations of social condition which have been spoken of as the Athenian age, the age of darkness, literally a long and profound intellectual eclipse, to which has succeeded the active era of mental excitement and of material progress in which we live, by which we are moved, the sun of which appears not yet to have reached its point of culmination.

In all the struggles which have marked the conflict between truth and error, ignorance and knowledge, medicine has always taken a conspicuous part, having ever been a faithful auxiliary, when not a leading element in every effort made to elevate and improve the condition of mankind, at one time allied to sacerdotal authority, as an indweller of the temples, and at another, incorporated into the body politic, or rather engrafted upon the tree of State.

In the earlier stages of civil advancement, in all those territories once composing the eastern and western empires, as is the case now in Europe, where certain forms of government exist, the sovereign authority prescribed the modes of worship, the forms of law and the requirements of medical practitioners. Unless the vigorous conservatism of these existing European governments is relaxed by the caprice of vain and foolish princes, at the suggestion of wicked men or misguided women, the right to exercise the functions of the physician is only conferred on the most satisfactory proof of indefatigable culture. And in the earlier pages of our own national history, we find the foot-prints of our European ancestors in the records of those salutary laws made for similar purposes, and transmitted to us by our political progenitors.

But in the process of time, when our form of government was changed, when the repository of sovereignty became inverted, when the power of the State passed from the few to the many, when the State became nothing and the citizens all in all, when this segregation of the sovereign power was rendered complete by the absolute freedom of the elective franchise in many of the States, then our art ceased to have a party in the commonwealth, as the law which became the exponent of this new opinion, the expression of the popular intelligence, effaced from the public record all legal traces of distinction between the physician and the hypocritical pretender.

When these ancient legal incentives to study were withdrawn, a new class of men, unprepared by mental discipline, rushed into the professional arena, bearing down by their numerical force the few remaining barriers which society was disposed to defend, notwithstanding the abrogation of law.

The political revolution which separated the American colonies from

the British crown, by loosening the connection between the Church and the State, insensibly led the way to the more complete separation of medicine from governmental control and political dependence. These manifestations of popular absolutism, which swept away the prerogatives of the clerical and medical professions, threatening to involve the law in the same uncharitable equality, were the remote causes of the professional abasement we had then reached, a humiliating consciousness of which aroused its members, who in the hope of reinstating its departed dignity formed this Association.

Whatever effect this unrestricted distribution of political power through all ranks of society, may have had upon the social body, it is not our business to enquire, as ours is not a political institution, but of its immediate influence in reducing medicine to a state of degradation, there is no reason for doubting the fact nor the propriety of this exposition, for with physicians, etiology is often a key of diagnosis, and without a true pathology, there is neither safety nor certainty in the therapeutics.

In treating of medicine in its social and political relations, it is not my design, as I have no wish, even if the power were inherent, to change our organization, or to advise an essential departure from our plans of operation. I have presented the subject in this light more for the purpose of reviving the courage of members who may have begun to despair of success, because the objects we set out to accomplish, have not been at once achieved.

Time must be given for results to mature, as all social institutions are of slow growth. Those who clothe and feed the members of them, must become imbibed with a sense of their importance and necessity for their advancement, as a means of promoting the public good, else their coöperation cannot be secure. Hence our duty of endeavoring to move the social body and all its dependencies, like the horses of a Grecian Chariot all abreast, striving at the same time to shield ourselves against the propensity inseparable from the absolutism of a pure democracy, to decapitate every object that raises its head above the surrounding social level.

We have stated with philosophical accuracy, but perhaps not with strict regard to literal-historic truth, that this Association was formed to repair the evils resulting from the dissevered relation of medicine to the State authority. Whatever formula we use in expressing the idea, or by whatever rationale we explain our conception of the evils said to exist, for which it was designed to furnish the remedy, the records show that its mission was to reform the medical schools of the United States, and to improve the preparatory education of students of medicine.

The development of organic bodies depends upon the absorption and assimilation of extraneous materials. If the same law regulates the growth of institutions, it becomes a matter of some interest to enquire whether the schools are an out-growth of the profession, or whether the profession is the product of the schools, for in either case, there is a labor for us to perform, and the answer to this question determines the place of beginning.

Lest a doubt might arise as to the correctness of the opinion, we wish to impress upon the professional mind, that society itself, and not we alone, are amenable to censure for the abasement to which the profession of medicine had descended at the date of our associated existence, let us for a moment look into the records of the past, to see whether we

cannot find an antecedent era, in which the world has been subjected to similar moral catoclysms, by which ancient institutions were broken up, their materials converted into drift, to lay the foundations of newer and more horizontal strata, from which we may draw lessons of wisdom applicable to our own time and our own condition.

We believe that there is no period of ancient history into which that of our art is intimately interwoven, presenting more analogies to our own, and at the same time, so distinctly marked by strong antithesis, as that which intervened between the death of the Savior and Mohammed, when for more than five hundred years, a mighty struggle was going on between that Divine Word, "who lighteth every man which cometh into the world," the spirit of the Indian religion and the majesty of the Roman Empire, the latter aided by a fascinating philosophy, made beautiful by the æsthetics of Longinus, each striving for the possession of the human race.

Whilst the Empire thus labored to throw its Upas shadow over the infant church, a social disintegration of castes, owing to these struggles and the irruption of barbarian hosts from the north, took place, and a consequent universal fusion of the races, languages and customs, producing an excitation of thought, and a blending of people analogous to the social fusion and the blending of types of disease, which we see daily taking place in our own time and in our country. The minds of men thus cut loose from their ancient fastenings, sought new affinities, arranged themselves in accordance with those difficulties into new forms, many of whom wandered into unexplored paths, hoping without the aid of a Divine guide to ascertain their relation to the unseen.

Thus, also, did the members of our own profession wander into untried and forbidden paths, in pursuit of the ideal, up to the time this Association was formed. A faithful picture of the last century of this historic period, presents the deepest contrasts of light and shadow that can be portrayed in a single work of art. The darkest hue of vice being drawn in the same pannel with the purest tints of virtue. The church, young and vigorous, being soiled by its contact with a paganism inexpressibly wicked, against which it waged a war, unmitigated by acts of mercy.

These outbreaks at emancipated human thought at each of these epochs have had their use: have produced their fruits—late in arriving at maturity it is true—and especially so will it be with the germs that are scattered in the midst of the confusion of our own times. An abiding faith, that good seed, in spite of the tares that may choke it, or the birds that may devour it by the wayside, will spring up and produce fruit in good season, has led me into historical retrospect.

During the period to which we have alluded just sufficient to show what forces disurbed and broke up ancient civilization, we find on closer examination, that the laws of the Empire relating to medicine, though unrepealed, were not enforced.

These laws made it the duty of the provincial governors to send the youth, subject to their jurisdiction, up to the city magistrates, where they were required to submit to the most rigid system of surveillance by the municipal authorities, their conduct as students, their deportment as citizens, being subjects of official scrutiny. The medical pupils under the training of the Archiatries, or State physicians, were fitted for the

performance of their duties in either the wards of the cities or in towns or villages, whither they were sent by imperial authority, on the requisition of the inhabitants, who paid for their services a stipulated price.

Notwithstanding these requirements of law were left unrepealed, the new opinions which had got possession of the popular mind, being more powerful than statutes, when enforced by the Perabolani, a body of religious medical enthusiasts, and various other pretenders, who, impelled by the spirit which animates a people having just been taught to exercise the privilege of judging in matters of faith, became presumptuous in matters of science, and by applying this newly acquired right of action to medicine, having numerical strength, they overrode the prerogatives of casts, and trampled under foot the wisdom of all preceding ages.

Whilst these conflicts of opinion were being carried on in an age that produced an Athanasius, Jerome, a Chrysostom, and an Augustine, and a system of Christian ethics which absorbed into itself all that was valuable in the philosophies of Greece and Egypt, medicine acquired celebrity from such names as Cacsarius, who became an Archiater—Palatinus, Oribasius, whose works remain as monuments of his genius and proofs of his culture; Actius, Alexander of Tralles, and Paulus Egineta, scarcely inferior in reputation to the father of medicine himself. The lustre of these names seems but the more expressively to mark the twilight of that night destined thence to brood over Europe, whilst the materials of ancient civilization, broken into fragments by a rude and vigorous barbarism, were slowly wearing away the characteristics of the conquering hordes, and preparing the way for its re-appearance in new forms, through the instrumentality of the Free Cities and the feudal institutions of Europe.

During this general eclipse of letters, its occultation continuing till the art of printing was invented, we have had furnished to us an opportunity of seeing how inadequate statues alone are to the development of institutions, and how impotent they are, even when aided by professional co-operation, to resist the obstacles interposed by an adverse public opinion.

If our design has been accomplished, we have shown that the work of medical regeneration is to be commenced by the profession, whose success is made dependent upon an intelligent concurrence of the popular judgment. But it must be remembered, that in attempting to bring about essential changes in social life, in public policy, or in the constitutional relations of the different States, by whose happy form of union we are permitted to meet here to-day as fellow-citizens of a common country, we must keep in mind this fact, that all organic nature is developed from embryonic existences—that all great changes of opinion have had their origin in germs, planted long antecedent to the production of fruit, and that advances in science and improvements in the method of its application to art, have also had their seed time, their period of growth, and must ever have their day of fruition.

History is filled with exemplifications of the truth of this remark, and of evidences of the perpetuity of this law. The first step on the road to the trans-Atlantic Telegraph was taken by Volta, when he constructed the Voltaic pile—the next was the formation of the Galvanic Battery. These inventions were followed by the discovery that soft iron becomes a magnet when subjected to the action of an electrical current and resumed its normal condition as soon as the current was withdrawn. Then



it was proved that the magnetic action of a current of electricity is not lengthened in intensity by passing through a long wire. Out of these antecedents, by the help of Grove's permanent battery, the Magnetic Telegraph was developed and the art of magnetic printing evolved.

But for the researches of Vesalius, who had traced out the course of the lacteals, the splendid discovery of Harvey of the circulation of the blood might have been a long time postponed.

Notwithstanding the perennial influence of those causes to which we have ascribed the tendency to professional abasement, we have met here to arrest and to counteract; there is in the condition of things by which we are surrounded, much to inspire us with confidence and to stimulate us to exertion.

We have not now, as did those who lived in the time of our historic analogue, to resist the pressure caused by the debris of an effete culture.

We have not to contend against the influence of those monstrous forms of superstition which grew out of the conjunction of Christianity, when defiled by a copartnership with the civil power, and the decaying institution of its Pagan predecessor, when a phase of credulity was developed which would prescribe the contents of a mummy case, in preference to the kreasote involved in the process of the manufacture of mummy, once an article of Egyptian commerce.

Those political causes to which we have alluded as tending to diminish the distance between our pre-existing social extremes, whereby the medical profession lost its claim to legislative protection, have already produced the signs of a growing national homogeneity, by fusing and re-casting into an American mould the various elements of which the nation is composed.

Among these materials, so readily amalgamated, which by their youth, energy and plasticity, give us our national character and national manners, there are some which need to be brought under the hammer of the forge, as well as the heat of the furnace, before they can be welded into the social mass. I allude to a class of men, wearing ecclesiastical habiliments, not wise enough to comprehend that the professions are the growths of civilization, developed by the wants and necessities of society, each one having its part to act in the drama of life, nor possessing that degree of self-respect, which would prompt a man, not even claiming to be divinely called, to avoid the contact of things proclaimed to be unclean.

When I speak of this class I do not mean the great body of American clergy—men who, instead of practicing a heterodox medicine, both practice and preach the precepts of their Divine Master as things which appertain to man's social and everlasting peace. But I mean a class, who, as if bitten by some moral Tarantula, become blinded by a phrenitic distemper, and like the great adversary of the Philistines, are ready to pull down the pillars of the temple, regardless of the ruin impending, whether that ruin involve a simple social element or the integrity of the national fabric.

Having, then, in our favor the vigor and impressibility of a new people, the resources of a new and rapidly developed country, the intelligence of a self-governing population, the augmentations of that intelligence by the unrestricted importation of learned works and the immigration of cultivated strangers, and the propulsion derived from a free and active press, we have a right to expect success. With such auxiliaries, by a

persistent assiduity on our part, we shall at some future day enjoy the happiness of seeing our labors crowned with the pagant of brilliant triumph.

The one thing already achieved, in the adoption and enforcement of the code of medical ethics, is worthy of commemoration by the observance of an annual holiday. Till then we had suffered more from quackery within the profession than from irregularities without. Now that order of things is reversed.

From a survey, even of the surface of society, we learn how soon the knowledge derived from medical sources strikes its roots into the popular soil. Take as example the subject of organic chemistry, and we shall see how rapidly its principles are passing into the stock of general intelligence. The numbers are daily on the increase, in every community, of those persons who know the necessity of nitrogenous articles of diet when repairs are to be made in the fibrous and areolar tissue, and how important an agency the carbo hydrogenous are supposed to exert, by increasing combustion in the removal of certain morbid conditions of the lungs.—In this way the mutual relations of the profession to the people is made apparent. The instruction communicated by the scientific physician is refunded to him in the increased capacity of the people to appreciate his worth.

We have spoken of the professions as the products of a general culture, to which, in our country, they must of necessity bear a fixed and definite relation, and of the reciprocal influences they and the society out of which they spring, exert upon each other. We have shown in a single example by what apparently simple quotations in scientific discovery, men are led to great practical results. As an incentive to industry, and as a reason for confidence in slow but certain success, we will detain you one moment longer, in a hasty sketch of the materials for thought that arise out of the contemplation of the field of nature, such a scene being as suggestive of thought and as full of instruction, as the examples furnished by the achievements of art.

In adjusting our telescope, to study the features of some snow-clad mountain, the organ of vision perhaps takes in the form of an enterprising explorer, whose feet still sparkling with ice as he descends from its summit, will crush out the fragrance of the plants which spring up to greet him as he walks downwards into the valley of flowers. From the eminence attained by his enterprise he could trace the course, and measure the elevation of the mountain chain, which give origin and direction to the rivers, effect the commerce, the languages and migrations of men, fix the character of the vegetation, the abode of its mammalia, and the habits of its population.

Subsidiary to the interest excited by this scene as a landscape, but not subordinate in importance, lies the geographical formation of the ranges which contain their mineral productions, give character to their fountains and increase to the variety and beauty of the vegetation, both on the slope of the mountains and in the valleys below.

Although a scene like this may excite emotion in the bosom of a savage, and awaken a sentiment of adoration for the majesty and power which can give such grandeur to nature, and even pass from the mind of an ordinary observer without any other expenditure of thought, yet to master it as a subject of scientific study would require a preparatory knowledge of what is contained in the writings of Werner and Hutton and Miller on

Geology, of Cuvier and Buckland on Paleontology, of Geoffrey, St. Hilaire and Agassiz on the races of men and the migration of Animals, of M. Balbi on Ethnography, and of Linnæus and De Candolle and Torrey and Gray on Botany. And to condense the whole into the congress of the "Cosmos" would require the genius and longevity of a Humboldt.

What is there then, gentlemen, left for us to do but to declare the perpetuity of this Association, and renew our vows of fidelity to the requirements of its constitution?

In this proclamation and in these vows are involved the pledges, that in our professional acts we will honor the principles of moral law, which lie at the foundation of our code of Medical Ethics. That we will use our individual influence, and so try to direct the power of this Association, as to secure a higher mental culture to medical students and candidates for medical honors. When this is accomplished the medical schools will rise in character as a correlative effect, and the profession establish for itself a legitimate claim to public confidence and popular esteem. Our custom of meeting in each successive year, in a different State of the Union, prevents the decay of the body, by the introduction of new material; and we illustrate in this way the doctrine of Zymosis, by the rapid assimilation of these new elements into the common mass. Another custom of the Association has done much to bind it to the individual States, that of shedding its honors upon the profession of the State in which the meetings are held, through which we hope to secure the sympathies of the people, and enlist them as allies in the warfare we are engaged in, against the hosts of ignorance.

A departure from the established usage of the Association, in either of these particulars, would mark the date of its decline both in vital force and mental vigor. Any restriction put upon its freedom of motion, or attempt made to centralize its influence, would enstamp it with the seal of decay.

But if the avenues to material success are so direct and brilliant, that the talent of the country is tempted to take the shorter road to wealth, whereby we fail in our attempts to lay the foundation of a national medical literature, in holding up a high exemplar to the medical student, by teaching him the necessity of a thorough preparatory discipline before commencing professional studies, and urging him by the force of opinion, to master the elements of his profession before assuming the responsibilities which attach to the discharge of its duties, we may yet in one way leave our traces upon the national character and our foot prints on the national history, in the hallowing of one day in our annual callender, on the recurrence of which, we may have, by the example of our patriotism, the stamp of nationality, in bringing to our shrine no sectional passions, and so conducting our proceedings that brilliant memories shall adorn our annals, the names of our celebrities be embalmed as national benefactors, and the anniversaries of this Association, in honor of their services, shall form by popular consent, one of the holidays of this glorious Republic.

Often in the crisis of sectional commotion the moral necessity of a common shrine, a national feast, a place, a time, or a memory sacred to fraternal sympathies and general observance, appeals the patriotic heart with regret, or warms it with desire! Were such a nucleus for popular enthusiasm, such a goal for a nation's pilgrimage, such a day for reciprocal gratulation our own—a time when the oath of fealty could be renewed at the same altar, the voice of encouragement be echoed from every sec-

tion of the confederacy, the memory of what has been, the appreciation of what is, and the hope of what may be, simultaneously felt, what a bond of union, a motive of forbearance, and pledge of nationality would be secured !

By the blessing of the Divine Founder of our holy religion, who, nineteen hundred years ago, went up to Jerusalem with his disciples to celebrate a national feast, may the proceedings of this body be so overruled, that the recollections of this meeting at Nashville to-day, when softened by the "moonlight of memory," may become a hallowed event in the annals of our yearly migration.

On motion of Dr. Flint, of Ky., the thanks of the Association were tendered to the President for his very able address, and the same was referred to the Committee on Publication.

The chairman of the Committee of Arrangements announced that the sessions of the Association would be from 9 A. M. to 2 P. M.

Judge Catron, of the U. S. Supreme Court, being present, was invited to a seat on the stand.

The Nominating Committee then retired for the purpose of nominating officers for the ensuing year.

The report of the Committee on Publication being called for it was read by Dr. Casper Wister, of Pennsylvania, and on motion, was accepted and referred to the committee on publication.

Dr. Wister also read his report as Treasurer, which was received and adopted.

On motion of Dr. Flint, of Ky., Dr. R. T. Fleming, of Ky., was admitted as a member of the Association by invitation.

The committee on Prize Essays being called upon to report, requested further time, because of the late hour at which the essays were handed in, which was granted.

The President informed the Association that Dr. F. Campbell Stewart, of New York, Dr. Alden March, of New York, Dr. Isador Gluck, of New York, and Dr. Pancoast, of Penn., had been appointed to represent this Association in foreign scientific bodies.

The committee on Medical Education was called but made no report.\*

The committee on Medical Literature was called—no report.

The committee on Medical Typography and Epidemics being called, a communication from Dr. J. C. Watson, of Maine, was read, asking for further time to make a report, which was granted.

Dr. Arnold, of Georgia, offered the following resolution, which was adopted :

*Resolved*, That the committee on Nominations be constituted a standing committee during the present session of the Association, to which shall be referred all business of the Association on which an immediate vote is not required.

Dr. Jas. Mauran, of the committee on Medical Topography and Epidemics for Rhode Island, being called for, the Secretary read his apology, which was accepted.

Dr. Peregrine Wroth, of same committee for Maryland, sent in his report, with accompanying reports of Drs. A. M. White and Edmund E. Waters, which was received and referred to the committee on Publications.

\* Received after the adjournment.

Dr. W. L. Sutton, of same committee for Kentucky, sent an apology and asked for further time, which was granted.

The members of the same committee for the States of New Hampshire, Vermont, Massachusetts, New York, New Jersey, Pennsylvania, Delaware, Virginia, District of Columbia, South Carolina, North Carolina, Tennessee and Minnesota being called, no reports were made.

The delegates from Connecticut and Louisiana being absent for the time, the considering of their reports was postponed until to-morrow.

A report from Dr. J. F. Posey, of Georgia, was presented by Dr. Arnold, and subsequently withdrawn by him for the purpose of preparing an abstract of it.

The committee on Nominations then appeared, and through their chairman, Dr. J. C. Lindsley, reported the following officers of the Association for the ensuing year, viz :

*President.*—DR. PAUL F. EVE, of Tennessee.

*Vice Presidents.*—R. J. Breckinridge, of Kentucky, D. M. Reese, of New York, W. H. Byford, of Indiana, and Henry F. Campbell, of Georgia.

On motion of Dr. Arnold, of Georgia, the report was accepted.

The chairman stated that the Secretaries will be selected when it is ascertained where the next meeting of the Association will be held.

Dr. Wister, of Pennsylvania, moved that a committee of three be appointed by the President to conduct the newly elected officers to the chair, which was carried.

The President appointed as such committee, Drs. Wister, Arnold and McGugin.

The President elect being absent, the Association adjourned to meet at 9 o'clock, A. M., to-morrow.

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#### SECOND DAY.

NASHVILLE, MAY 6, 1857.

The Association met pursuant to adjournment. The minutes of yesterday were read and adopted.

The committee appointed on yesterday, Drs. Wister, Arnold and McGugin, were then requested to conduct the newly elected officers to their respective seats.

Dr. Eve, of Tennessee, in taking the chair, addressed the Association in a few pertinent remarks, as follows :

*Gentlemen of the American Medical Association:*—It is with deep emotion that I attempt to return you my heart-felt thanks for this distinguished honor. In elevating one so unworthy of this station, so ill-prepared to preside over your deliberations, or carry out the great designs of this body, I must express the apprehension that you have done yourselves injustice, and, it may be, not advanced its best interests. But, believing that this office should neither be sought nor declined, when tendered as it has been, after my State had declined to take any part in the nomination of a presiding officer, I enter upon the discharge of its onerous duties with much diffidence, and shall have frequent occasion to throw myself upon your considerate indulgence.

We are engaged, gentlemen, in a good and noble work. Life, the greatest of human blessings, and health, the sweetest stimulus of earthly

enjoyments, are our end and aim. We live to secure the one and to preserve the other. To promote these all important objects, the medical profession of our country have, during the past twelve years annually appointed delegates to assemble and counsel how this may be effected. And we are here to-day on one of these great festive occasions, and, amidst our mutual congratulations, these glorious re-unions of good-will and fellowship among the brotherhood, must not forget that to us is committed the health and lives of others. In maintaining the honor and increasing the usefulness of medical science, we become the best contributors to the welfare and happiness of those around us. You have come up hither from the North and from the South, from the East and from the West, and have done well neither to count the cost nor calculate the sacrifice; for the cause in which you are engaged is worthy of you. You present again the sublime spectacle of brethren from all sections of this widely extended Union, congregated to devise the best means to relieve suffering humanity; and may I not add, we are here with

“Our souls by love together knit,  
Cemented, mixed in one;  
One hope, one heart, one mind, one voice.”

Dr. Winston, of Tennessee, read the names of additional delegates to the Association.

Dr. Hooker, from the committee on Medical Topography and Epidemics for the State of Connecticut, being called on for his report, arose and explained that it was his understanding that the committee were to have three years in which to make their report, and at the end of that time he would either be prepared or ask the indulgence of the Association for further time.

The President, under a resolution passed at the last meeting, appointed Drs. Currey, Grant and Evans, a committee on Voluntary Contributions.

Reports now being in order, the report of Dr. Posey of Georgia, was called for; Dr. Arnold, of Georgia, read an abstract of the report of Dr. Posey; all of which, on motion of Dr. Palmer, of Michigan, was referred to the committee on Publication, under a suspension of the rule.

On motion of Dr. Wood, of New York, the reports which were presented yesterday were also referred to the committee on Publication, under a suspension of the rule.

The State of Ohio being called upon for a report upon its Medical Topography and Epidemics, the Secretary read an apology from Dr. G. Mendenhall, who asked further time in which to make a report, which was granted.

The States of Mississippi, Missouri, Michigan, Illinois, Indiana, Wisconsin, Iowa, California, and the U. S. Navy, being called, no response was made.

A telegraphic despatch from Dr. J. M. Sims, of New York, who was to report on the Treatment of the Results of Obstructed Labor, was received and referred to the appropriate committee.

A communication was received from the Southern Methodist Publishing House, inviting the members of the Association to visit that establishment, which was accepted.

A communication was read by Dr. Lindsley, of Tennessee, from the Medical Association of Washington City, inviting the National Association

tion to hold their next annual meeting in that city. On motion the communication was referred to the committee on Nominations.

A resolution was offered by Dr. Bartlett of Wisconsin, tendering a vote of thanks to the late President, Zina Pitcher, for the able manner in which he has presided over the deliberations of this body, which was unanimously adopted.

The reports of Special Committees for 1856-7, being next in order, they were called in order as follows :

*Inflammation—its Pathology, etc.*—Dr. E. R. Peaslee, Maine ; asked further time. Referred.

*Anatomy and Histology, of the Cervix Uteri.*—Drs. H. Hutchinson and Charles E. Isaacs, New York ; no report.

*Treatment of Cholera.*—Dr. J. Taylor Bradford, Kentucky ; no report.

*Treatment best adapted to each variety of Cataract, etc.*—Dr Mark Stephenson, New York ; further time asked. Referred.

*Causes of the Impulse of the Heart, etc.*—Dr. J. W. Corson, of New York ; a communication was received, and on motion of Dr. Brodie, he was continued.

*Causes of Infant Mortality, etc.*—Dr. D. Meredith Reese, of New York, read an abstract of his report, which was referred to the committee on Publication.

The venerable Dr. Shelby, of Tennessee, being present, was invited to a seat on the stand. His appearance was warmly acknowledged.

Dr. Hobbs, of Illinois, offered the following resolution :

*Resolved*, That a committee on Essays, (not including Prize Essays,) be appointed, to whom all essays prepared for publication by this Association shall be referred, which committee shall transfer to the committee on Publication, all Essays they judge worth publishing. That said committee on essays, make a full report of their proceedings to the Association at its next annual session ; provided, authors of rejected essays being informed of said rejection by said committee, shall have the privilege of withdrawing their essays from the report of the committee to the Association.

On motion of Dr. Palmer of Michigan, the resolution was indefinitely postponed.

The Secretary read a protest signed by Drs. Richard Arnold, J. Gordon Howard, Pike Brown and George P. Pandleford, against admitting the delegates from Oglethorpe Medical College, as follows :

NASHVILLE, May 6, 1857.

The undersigned, members of the American Medical Association, protest against the admission of delegates from the Oglethorpe Medical College of Savannah, on the ground that it is not a regularly organized college, it being a matter of public notoriety in Savannah, that during neither of the two sessions of its existence, have all the chairs been regularly filled. During its first session the chairs of Physiology and Materia Medica were not filled, except by a very few lectures, by the gentleman appointed to them, and the same thing occurred during its last session as to the Chairs of Materia Medica and Chemistry. All of which is respectfully submitted.

RICHARD D. ARNOLD, M. D.  
J. GORDON HOWARD, M. D.  
PIKE BROWN, M. D.  
GEO. P. PADLEFORD, M. D.

After several resolutions were offered and some discussion,

On motion of Dr. Palmer, the whole subject was referred to a committee of three to be appointed by the chair.

Dr. Brodie of Michigan, moved as an amendment, that no Faculty Member of a Medical College be appointed upon the committee, which was accepted by the mover.

The Chair appointed as such committee, Drs. Wister, of Pennsylvania, Beniss, of Kentucky, and Gibbs, of South Carolina.

Dr. Felix Robertson, the oldest physician in Tennessee, being present, was invited to a seat on the stand. He was greeted with marked consideration by the Association.

The Committee on Nominations was convened to transact important business.

The calling of Special Committees was resumed :

*Spontaneous Umbilical Hemorrhage, etc.*—Dr. J. Foster Jenkins, New York. Further time asked. Referred.

*Use of Instruments in Obstetrical Practice.*—Dr. Henry Carpenter, of Pennsylvania. No report.

*Measures to be adopted to Remedy the Evils existing in the present mode of holding Coroner's Inquests.*—Dr. Alexander J. Semmes, D. C. Report presented with the following resolution attached :

*Resolved*, That committees of three, in each State, Territory and the District of Columbia, be appointed, and that said committee be, and they are hereby authorized in the name of this Association, to memorialize their respective Legislatures, to pass such laws as will best carry into effect the objects of the foregoing report.

The report was referred to the Committee on Publications, and the accompanying report adopted and referred to the committee on Nominations.

*True Position and Value of Operative Surgery, etc.*—Dr. J. B. Flint, of Kentucky. Further time asked ; granted.

*Causes and Cure of Indigestion, etc.*—Dr. G. Volney Dorsey, of Ohio. No report.

*Medical Jurisprudence of Insanity, etc.*—Dr. C. B. Coventry, of New York. Further time granted.

*Human, Animal and Vegetable Parasites.*—Dr. Joseph Leidy, Pennsylvania. No report.

*Value of strict attention to position in the Treatment of Diseases of the Abdomen.*—Dr. M. D. Darnall, Indiana. No report.

*Milk Sickness.*—Dr. George Sutton, Indiana. No report.

*Blending and Conversion of the Types of Fever.*—Dr. Clark G. Pease, Wisconsin. Communication sent, but not received. Postponed.

*Best Substitutes of Cinchona, etc.*—Dr. B. S. Woodworth, Indiana. No report.

*Use of Cinchona in Malarious Diseases.*—Dr. Franklin Hinkle, Pennsylvania. Report furnished. Referred to Committee on Publication.

*Nervous System in Febrile Disease.*—Dr. Henry F. Campbell, Georgia. Verbal abstract of report given. Referred to Committee on Publication.

*Laws Governing the absorption and Deposit of Bone.*—Dr. John Neill, Pennsylvania. No report.

*Intimate Effects of Certain Toxicological Agents in the Animal Tissues and Fluids.*—Dr. John W. Green, New York. No report.



*Intimate Structure and Pathology of the Kidney.*—Dr. Charles E. Isaacs, New York. Further time granted.

*Diseases Incidental to Emigrants, etc.*—Dr. Israel Moses, New York. No report.

*Etiology and Pathology of Epidemic Cholera.*—Dr. T. W. Gordon, Ohio. Partial report presented and referred.

*Excretions as an Index to the Changes going on in the System.*—Dr. H. A. Johnson, Illinois. No report.

*Remedial Effects of Chloroform.*—Dr. D. D. Thompson, Kentucky. No report.

*Best Method of Causing an Increase in the number of Essays, etc.*—Committee: Drs. Leidy, Wood and Meigs, Pennsylvania. No report. Committee continued.

*Changes produced in Composition and Properties of Milk, etc.*—Dr. N. S. Davis, Illinois. Communication read and further time granted.

*Stomatitis Materna.*—Dr. McGugin, Iowa. Further time granted.

An abstract of the report of Dr. Fenner, of Louisiana, upon the Medical Topography of that State, was then read and referred.

Dr. Singleton, of Kentucky, offered the following resolution, which was unanimously adopted:

*Resolved*, That in the death of Dr. Grafton, of Mississippi, the American Medical Association has lost a talented and useful member, and society a benefactor.

On motion of Dr. Whitaker, of Tennessee, Dr. H. Ronalds was expelled from the Association for giving certificate contrary to the rules of the Association.

Dr. Caspar Wister, chairman of the committee upon the admission of the delegates from Oglethorpe Medical College, reported as follows:

Dr. W. Benson asserts that for the past session the Oglethorpe school has been fully organized, that six professorships have been regularly filled, and that the occupants of these chairs have been in the constant fulfillment of their duties, except in cases of illness; such instances having, however, at no time interrupted the regular course of lectures, the professor absent having had his place supplied by his colleagues. The seventh chair is admitted to have been vacant; the duties were discharged however, fully by other members of the faculty.

Dr. R. D. Arnold prefers no charges beyond those admitted above.

Therefore, your committee finding nothing that infringes upon the strict letter of the law of the American Medical Association, in reference to the admission of members, we recommend that all further action in this question be suspended.

CASPAR WISTER,  
R. W. GIBBES,  
A. M. BEMISS.

The Secretary read the following preamble and resolutions, which were unanimously adopted:

WHEREAS, It has pleased God to remove by death our fellow-member, Robert M. Porter, and because of his devotion to the interests of the Profession of Medicine, and his steady support of the American Medical Association,

*Resolved*, That this Association learned with unfeigned sorrow of his decease; and that they have lost a firm and intelligent supporter, and society a benefactor and friend.

Dr. T. Bullard, of Indiana, offered the following :

*Resolved*, That in the death of Dr. John L. Mothersett, this Association has lost a useful member, and Society a benefactor.

The Secretary read a communication from the Connecticut Medical Society, asking that the time for holding the meetings of the Association in northern cities be changed to a later period in the year. Referred over to the next meeting by the Constitution. Adjourned to meet at 9 o'clock, A. M., to-morrow.

#### THIRD DAY.

NASHVILLE, May 7, 1857.

The Association met pursuant to adjournment. The minutes of yesterday were read and adopted.

Dr. Hoyte, from the Committee of Arrangements, read the names of additional delegates to the Association, who had arrived since the meeting of the Association yesterday.

The Secretary read a communication from Dr. Clark G. Pease, of Wisconsin, which accompanied his report on "*Blending and Conversion of the Types of Fever*."

Dr. Hooker of Connecticut, moved that the report be referred to the Committee on Voluntary Contributions.

Dr. McKinley moved to amend by having a portion of the report read, which was lost, and the motion recurring to refer the report, it was carried.

Dr. Currey, from the Committee on Voluntary Contributions, submitted the following report, which was accepted :

The Committee on Voluntary Contributions has examined the following papers, and recommend them for publication in the Transactions of the Association :

1st. A new Principle of Diagnosis in Dislocations of the Shoulder Joint. By L. A. Dugas, M. D., Professor of Surgery in the Medical College of Georgia, Augusta ; accompanied by four photographic plates illustrating the principle.

2d. Medical Statistics of Washington Territory. By George Suckley, M. D., U. S. A., embracing, 1st, Geological Divisions of the Territory ; its Geology, Meteorology, Fauna. 2d, White population and its diseases. 3d, Native population ; Diseases ; Medical Practice ; causes of their rapid disappearance ; concluding remarks.

3d. Medical Flora of Washington and Oregon Territories. By J. G. Cooper, M. D.

All of which is respectfully submitted.

R. O. CURREY,  
R. T. EVANS,  
GEO. R. GRANT.

Dr. Yandell offered the following resolution :

*Resolved*, That this Association re-affirm the principles respecting the rights of constituent bodies announced in a report contained in Volume V., of its Transactions, in the following terms :

"The Faculty of every Medical College, shall have the privilege of sending two delegates to this Association, *provided*, that the said Faculty contain not less than six Professors, who give one course of instruction annually, of not less than six weeks, on Anatomy, Materia Medica, Theory and Practice of Medicine and of Surgery, Midwifery, and Chem-

istry; and also that said Faculty requires that its candidates for graduation, among other requisites, shall have attended two full courses of lectures with an interval of not less than six months between them, one of which courses must have been in their Institution.

Dr. Breckinridge in the Chair.

Dr. Buchanan proceeded to discuss the resolution, and at the close of his remarks, moved to lay it on the table, which was subsequently withdrawn.

Dr. Boring offered the following resolutions in lieu, which he proceeded to discuss:

*Resolved*, That this Association has not the power to control the subject of Medical Education.

*Resolved*, That the great objects of this Association are the advancement of Medical Science, and the promotion of harmony in the profession.

*Resolved*, That the attempt upon the part of this body to regulate Medical Education, having most signally failed in its object, and already introduced elements of discord, any further interference with this subject would not only be useless, but calculated to disturb and distract the deliberations of this Association.

Dr. Currey offered the following resolutions in lieu of the whole:

*Whereas*, The subject of Medical Education has been committed at each annual Session to Standing Committees, and various suggestions have been proposed, which the Association has adopted, and recommended to private instructors and to the Medical Colleges.

*Resolved*, That a committee of five be appointed by the Committee on nominations, as a Special Committee, to be composed of members who are in no respect connected with any Medical School, to devise a *System of Medical Instruction*, to be presented for the consideration of this Association at its annual Session in 1858.

*Resolved*, That the proposed system shall set forth a uniform basis, upon which our Medical Institutions shall be organized, as well as have reference to the best mode of securing the Preparatory Medical Instruction to the Student, and that consequently the legitimate subjects to be embraced in said system, will include Primary Medical Schools—the number of Professorships in Medical Colleges, the length and number of terms during the year, the requisite qualifications for graduation, and such other subjects of a general character as to give uniformity to our Medical system, and preserve harmony and friendly intercourse in the ranks of the profession.

*Resolved*, That upon the adoption of the proposed system by the Association, all Institutions which may conform to it shall be entitled to representation at the Annual Sessions of this Association and none others.

The subject was further discussed by several members of the Association.

Dr. Reese, after some remarks, moved the indefinite postponement of the whole subject; which was lost.

Dr. Arnold moved the previous question, which was lost, and the discussion proceeded at considerable length, when

Dr. Hooker moved the previous question on the resolutions of Dr. Currey.

The reading of the various resolutions being called for, they were read to the Association.

The motion of Dr. Hooker being in order, the previous question was called, and the resolutions of Dr. Currey were adopted.

Dr. Lindsley, from the Nominating Committee, submitted the following report:

*Secretaries.*—Robert C. Foster, of Tennessee, A. J. Semmes, of Washington City.

*Treasurer.*—Caspar Wister of Philadelphia.

For the next place of meeting, Washington City.

#### STANDING COMMITTEES.

*Committee of Publication.*—Francis G. Smith, of Philadelphia, chairman; Caspar Wister, of Philadelphia; R. C. Foster, of Nashville; A. J. Semmes, of Washington City; Samuel L. Hollingsworth, of Philadelphia; Samuel Lewis, of Pennsylvania; H. F. Askew, of Delaware.

*Committee on Prize Essays.*—Grafton Tyler, of Georgetown, D. C., chairman; J. C. Hall, of D. C.; J. F. May, of D. C.; Thomas Miller, of D. C.; A. J. Semmes, of D. C.; Joshua Riley, of D. C.; W. J. C. Duhamel, of D. C.

*Committee of Arrangements.*—Harvey Lindsly, chairman, W. J. C. Duhamel, Cornelius Boyle, P. H. Coolidge, G. M. Dove, A. Y. P. Garnett, Wm. P. Johnston, of D. C.

*Committee on Medical Education.*—G. W. Norris, of Philadelphia, chairman; A. H. Luce, of Illinois; E. R. Henderson, of South Carolina; G. R. Grant, of Tennessee; T. S. Powell, of Georgia.

*Committee on Medical Literature.*—A. B. Palmer, of Detroit, chairman; A. F. Alexander, of Alabama; J. M. Mosgrove, of Ohio; P. Cassidy, of Pennsylvania; S. Pollak, of Missouri.

*Vacancies in Committee on Medical Topography and Epidemics.*—T. B. Shuford, to fill the vacancy caused by the death of Dr. Grafton, of Mississippi. C. W. Parsons, to fill the vacancy caused by the resignation of Joseph Mauran, of Rhode Island.

#### SPECIAL COMMITTEES.

*Spontaneous Umbilical Hemorrhage of the newly born.*—J. Foster Jenkins, of New York.

*Influence of Marriage of Consanguinity upon Offspring.*—Dr. Bemiss, of Kentucky.

*Functions of Different portions of the Cerebellum.*—E. Andrews, of Illinois.

*Causes of the impulse of the Heart and the agencies which influence it in health and disease.*—J. W. Corson, of New York City.

*Treatment of the Results of Obstructed Labor.*—J. Marion Sims, of New York.

*Treatment best adapted to each variety of cataract, with the method of operation, place of election, time, age, etc.*—Mark Stephenson, of New York.

*Human, Animal and Vegetable Parasites.*—Joseph Leidy, of Philadelphia.

*Best Substitutes for Cinchona and its preparation in the treatment of Intermittent Fever, etc.*—B. S. Woodward, of Indiana.

*Intimate structure and pathology of the Kidney.*—Charles F. Isaacs, of New York.

*Etiology and Pathology of Epidemic Cholera.*—T. W. Gordon, of Ohio.

*Inflammation of Cervix Uteri.*—Henry H. Miller of Louisville, Kentucky.

*On Milk Sickness.*—W. H. Byford, of Indiana.

*Best means of causing an increase of the number of Essays.*—Drs. Leidy, Wood and Meigs, of Pennsylvania.

*Changes produced in Composition and Properties of Milk.*—N. S. Davis, of Illinois.

*Stomatitis Materna.*—D. C. McGugin, of Iowa.

*On Criminal Abortion with a view to its general suppression.*—H. N. Storer, of Boston.

The committee recommend that the committees ordered by the adoption of the resolutions accompanying Dr. A. J. Semmes' report, be filled by the several State Societies.

On motion of Dr. Brodie, amended so as to refer the same to the officers of several State Societies. Carried.

The committee also recommend the amendment of the third article of the constitution, in relation to meetings, by inserting after the words "first Tuesday in May," the words, *or the first Tuesday in June*, and also by inserting after the words "shall be determined," the words, *with the time of meeting*.

*Special Committee on the present state of science, as regards the Pathology and Therapeutics of the Reproductive Organs of the Female.*—D. Fordyce Barker, of New York.

*On Moral Insanity.*—D. M. Reese, of New York.

*On Calculi and the Diseases of the Urinary Organs, in Iowa, Minnesota, and Nebraska.*—Dr. J. C. Hughes, of Keokuk, Iowa.

*On the nature, tendency and general treatment of Syphilitic Bubo.*—Moses Gunn, of Detroit, Michigan.

*Organic Chemistry—its progress and relations to Physiology and Pathology.*—Professor Samuel St. John, of New York.

*On Medical Education.*—(By Dr. Currey's resolution,) James R. Wood, of New York; George R. Grant, of Memphis, Tennessee; John Watson, of New York; C. B. Nottingham of Macon, Georgia; Rene La Roche, of Philadelphia, Pennsylvania.

*To fill a vacancy in the Committee on Medical Topography and Epidemics.*—Dr. J. L. Cabell, of Charlottesville, Virginia.

Dr. March moved that the Report of the Nominating Committee be taken up, and each subject to which it refers, be considered separately, which motion prevailed. That portion relating to nominations was then adopted.

The place of the next annual meeting of the Association being the next subject in order, after some discussion, on motion of Dr. March, the report of the committee was adopted.

Dr. Lindsley moved that, as Dr. Semmes, one of the newly elected Secretaries was absent, Dr. Brodie, of Michigan, be elected Secretary *pro tem*, which was carried.

Dr. Pitcher offered the following resolution, which was unanimously adopted:

*Resolved*, That a committee of three be appointed, of which the President of the Association shall be chairman, to communicate with the

Surgeon General of the Army, the chief of the Medical Bureau of the Navy, and the Secretary of the Treasury of the United States, with a view to secure the concurrence of these departments of the Federal Government, so that its contributions to the Medical Topography, the Vital Statistics, and the Sanitary Police of the nation may be made tributary to the labors of this Association.

The Chair appointed as such committee, Drs. Z. Pitcher, of Michigan, and R. H. Coolidge, of Kansas.

Dr. Bowling, Chairman of the Committee on Prize Essays, submitted the report of said Committee, as follows :

The Committee on Prize Essays report that four essays have been received, each possessing great merit.

The Committee selected the following two Essays for the two prizes, provided for at the last meeting of this Association.

1st. One entitled "The Excreto-Secretory System of Nerves. Its relation to Physiology and Pathology," with the following motto :

*"Observation becomes Experiment when used in severe processes of Induction,"* and signed Henry Fraser Campbell, Georgia.

2nd. "Experimental researches relative to the Nutrition, Value and Physiological Effects of Albumen, Starch and gum when singly and exclusively used as Food," with the following motto :

*"Quæ sequimur? quæ in jubes? ubi ponere sedis?"*

*"Da pater agurium, atque animis illabere nostris!"* and signed, William A. Hammond, M. D., Assistant Surgeon, U. S. Army.

The President read an invitation to the members of the Association, to visit the University of Nashville, in its Military, Literary and Medical Departments.

The Committee on Voluntary Contributions, reported in favor of the publication in the Transactions of the Association, of the following paper. "On the blending and conversion of the Types in Fever." By C. S. Pease, M. D., of Wisconsin. The report was adopted.

Dr. McMurray offered the following resolution which was adopted :

*Resolved*, By this Association, that the Committee on Publications be instructed to append the Code of Ethics of the American Medical Association to each volume of its present and future Annual Transactions.

The amendments to the Constitution proposed by Dr. Stocker, of Pa., at the last Annual Session, were taken up and laid on the table.

Dr. Lindsley offered the following amendment to the Constitution, which was seconded by Dr. Gunn :

"In Art. II, omit the words 'Medical Colleges' and also the words 'The Faculty of every regular constituted Medical College, or chartered School of Medicine, shall have the privilege of sending two delegates.'"

The amendment lies over until the next meeting of the Association, under a rule of the organization.

On motion of Dr. Palmer, the resolutions reported at the last Annual meeting of the Association, by the Committees on Plans of Organization for State and County Medical Societies were taken up and adopted.

The following resolutions were offered and adopted :

By Dr. Pitcher—

*Resolved*, That the members of this Association, as recipients of the cordial, generous, and elegant hospitalities extended to them by the profession and the citizens of Nashville, in placing on record an expression

of thanks for the social amenities they have enjoyed during its tenth annual session, wish also to leave behind them the assurance, that the recollection of their short sojourn in Tennessee, will be cherished as dearly as the remembrance of the far off sound of water, by the exhausted and way-worn traveler.

By Dr. Means—

*Resolved*, That the earnest thanks of this body be presented to the authorities of the State and City, who have tendered this magnificent State Capitol for their sittings during the present session.

By Dr. Currey—

*Resolved*, That the thanks of the Association be tendered to the Reporters of the City Press, for the accuracy and promptness with which they have reported the proceedings of the Association, and to the Publishers, for the liberal supply of their morning papers during the Sessions of the Association.

By Dr. Wister—

*Resolved*, That the thanks of this meeting be presented to Dr. Wm. Brodie, for the efficiency with which he has discharged his duties of Secretary.

By Dr. Byford—

*Resolved*, That the State and County Societies throughout the Union be requested to recommend their members to purchase the Transactions of the American Medical Association, and that their officers act as agents for the same.

On motion of Dr. Gunn, of Michigan, the Association recognized the presentation of a pamphlet by Henry Fraser Campbell, M. D., claiming "Priority in the Discovery and naming of the Excito-Secretory System of Nerves."

On motion of Dr. Byford, the Association then adjourned *sine die*.

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*A Review of the Medical Testimony in the Case of Charles B. Huntington.* BY CHARELS F. J. LEHLBACH, M. D., Newark, N. J.

It is an unfortunate circumstance, that men who strive toward reform—who nobly stand up in defence of the demands and wants of a progressing age—who defy the censures of prejudiced minds, when duty calls to oppose errors, though sanctified by age, are always more ridiculed, sneered at and maligned by the members of their own profession, by the men who, before all, should come to the rescue when great principles and great truths are at stake. It is an unfortunate circumstance; but it must be borne. There is no remedy for it as long as mediocrity has its sway, and this will always be the case. It is so with all professions, throughout all classes of men, through all ages. Never was a man arraigned before the public, for the crime of attempting reform, but his professional brethren were the first to throw the stone at him. Never did a man promulgate reformatory ideas, but there arose in his own profession men to question his motives, and if this failed, to try those pre-

cious tricks of ridicule and sarcasm, to make light of the matter and thus create in the public mind the impression, as if the reformer was a clever, but half crazy individual, more to be pitied than opposed.

The case of Charles B. Huntington, in whose trial for forgery the plea of insanity was set up—and in our opinion there never was a case, in which this plea was sustained by better arguments, reasons, and facts—is not only an especially interesting and instructive case, but one of great importance. Hence the public and the profession are indebted to the gentlemen, both medical and legal, who have undertaken the task of publishing all the matter connected with it, in the volume whose title appears at the head of this article. Whilst we shall refer the critical reader to this volume, we shall proceed to give a short *résumé* of the bearings of this case for the benefit of those to whom the work is not accessible, and more especially for the benefit of those of our brethren, who are so very loud in their declamations against Drs. Parker and Gilman, and so very anxious to pronounce them “entrapped fools of legal cunning” or “medical heretics.” There are men, who, being themselves of excessively small proportions, have a truly insane notion of magnifying their own size by ridiculing those who excel them. We recollect the story of a little, shrimpy-looking dwarf of a doctor, who made great pretensions to obstetric learning, and imagined that the only obstacle in his way to professional eminence was the established professor of that chair in a certain school. Having tried all means to have him leave the faculty, or the faculty leave him, by “*coup de main*” or “*coup de pied*,” and having failed, one day a wag told him that the professor had been most shamefully imposed upon by a man, who had sold him a horse for a mare. This was a hoax. But our little friend ran around, everywhere telling people what a shame it was, that a professor of obstetrics should buy a horse for a mare, until he met the professor himself and accosted him: “Doctor, is it true that you have been buying a horse for a mare?”—“No,” thundered the professor, “but I have just heard the voice of Balaam’s ass.” With these remarks, and suggesting to the reader the propriety of keeping his temper, if the opinions here advanced should not agree with his own, we will proceed to discuss the bearings of the medical testimony in Huntington’s case: 1. In regard to the subject of insanity. 2. In regard to its moral aspect. 3. In regard to criminal legislation.

1. The opinions given on the witness-stand by Drs. Parker and Gilman are twofold in their nature and character. They are such as relate to the *general* subject of insanity, while another series of answers, to the questions proposed by counsel, relate to the *special* case of Huntington’s insanity. To the philosophical mind these general points in the testimony are of more importance and interest than the secondary question of Huntington’s particular case. Instead of Huntington, it might have been Smith or Brown; instead of forgery, the crime might have been homicide or arson; this would have changed the special nature of the case. The accused might have been a woman; this would have turned the sympathies of the public, and even perhaps of the cold-blooded “Times”—that exponent of the philosophy of expediency—in the prisoner’s favor; more than this, a high-minded reform-loving judge might have presided over the case and delivered his charge to a more enlightened, more humane, less expediency-philosophizing jury; all these things



together would have changed the special nature of the case, but they would not have altered the importance or interest of the testimony given in the case, upon the general question of insanity. These points, however, are sadly overlooked by the public and the profession. Amid the clamors of an excited criticism, even "Gotham, Jr." is led astray and excitingly exclaims: "Who is a criminal if Huntington is insane?"—while he loses sight altogether of the very interesting, very important and most beautiful points in the testimony in regard to the general subject of insanity, which we will presently point out. And these *general* principles of insanity were made the very points of attack by prosecution and judge. Huntington was committed; but not on the ground that the medical testimony was not sufficiently strong to establish his insanity, not on the ground that the physicians were incapable of conducting the examination; nothing of all this, but he was condemned because Judge Capron would not recognize the *principles* of insanity, as laid down by the medical witnesses. We say "Judge Capron:"—if we had said "the law would not recognize them," we would have ascribed to an unknown entity what is justly due to the individual cleverness, legal learning, and conservative wisdom of that honorable gentleman, who has since won still greater laurels. And it is also not so much the alleged fallacy of the opinions of Drs. Parker and Gilman as diagnosticians against which the censures of the medical men are directed, but against their opinions on insanity in general, and especially moral insanity. Thus doctors, lawyers, divines, teachers and Wall Street brokers, all unite to frighten away this ghost of moral insanity, which sprung upon their vivid imagination with all the horrors of an innovation. A little reflection, a little of that kind of investigation which looks at all things, even at forgery, *sine ira et studio*, would convince them that what appears an horrid resolution is but a necessary and wholesome reform, what seems an absurdity is but an old truth, and would show them especially, that there is something very rotten in the present principles of law in regard to insanity, as well as in the practice of criminal legislation. But before analyzing this legal carcass, let us look at the points in the testimony alluded to.

The first point which we will mention, and the most important and interesting, is the clear and triumphant exposition by Drs. Parker and Gilman of the great physiological principle, *that there is no disease of the mind without disease of the body; that insanity implies a morbid condition and an abnormal action of the brain*. When we say "triumphant," we mean that they established this principle before court and jury, in spite of the shrewd, slippery, and adroit cunning of the prosecuting attorney. There are more than half a dozen questions put by that gentleman, the sole object of which, if they had any, was to throw Dr. Parker off his guard, and make him say, that there might be this or the other form of insanity without a change in the nervous centres. The reader may judge for himself by studying the following example of medical firmness unshaken, and legal perseverance under difficulties:—

*Dr. Parker Cross-examined by Mr. Noyes.*

Q. Do you mean to say that this *mental organization*<sup>1</sup> was such that he could not resist the impulse or tendency to commit forgery?

A. I do: the "tendency," that is the word, sir.

<sup>1</sup> *Italics our own.*

Q. That is the point, then, upon which you placed it—that his *mental* organization was such that he could not resist the tendency to commit forgery? Now, why could he not resist it?

A. Because of his diseased organization. *I do not mean mental organization.* The organization of the mind I know nothing about.

Q. Do you say physical or mental?

A. I say *physical*.

Q. You say so, because of his physical organization?

A. Yes.

Q. So, then, it is his physical organization, when his mental operations are all right?

A. I think his mental operations are not right. *They would be if his physical organization was.*

Q. They are bad, because his physical organization is bad?

A. Yes, because his physical organization is bad.

*Examined by Mr. Brady.*

Q. As I understand you, Dr. Parker, all insanity of which you speak, you refer to physical causes?

A. The insanity of which we spoke to-day, I refer to physical causes.

Q. What we call intellectual insanity applies to the mental process alone?

A. The process of the intellect.

Q. And moral insanity is as much a *disease of the brain* as the other, but manifests itself in the will, the feelings, and affections, and not in the mental or intellectual process?

A. Yes.

*Dr. Gilman Cross-examined by Mr. Noyes.*

Q. I find your definition of insanity in an address published, as the best definition you have been able to make: "Insanity is a disease of the brain by which the freedom of will is impaired."

A. I admit that sir.

Q. I ask you in what respect the freedom of Huntington's will was impaired?

A. I suppose Huntington did these things, when he knew they were wrong, *in consequence of his having a disease of the brain.*

Q. He had will enough to do them. In what respect was his freedom impaired?

A. The temptation was such, that his power of resistance, diminished by *physical organization*, could not overcome it.

Q. In other words, he could not resist the temptation from his *physical organization*?

A. From mental defects, dependent on *physical organization*.

This is exceedingly important testimony, and still more so because it stands unrefuted, untouched by the public prosecutor in his summing up, or by the Judge's charge. For years, every intelligent, unprejudiced physician has known this principle to be as correct and true as anything human can be; for years, medical and physiological writers have spoken of it as a thing almost self-evident. And still, when we look over medical testimony of recent cases, where the plea of insanity is set forth, curious to relate, we find persons acquitted and persons condemned on testimony which ignores and denies this principle altogether, testimony

which would have passed at par in the last century, but which at the present day is simply ridiculous. About six years ago, a young woman stood accused in our city for the crime of murder.<sup>1</sup> She had, in a fit of passion, stabbed her former paramour, who had been married to another girl, and was acquitted on the plea of insanity. The reader will judge for himself whether looseness of expression and definition, or the ignoring of well established physiological principles is more to be admired in the portion of testimony following.

*Dr. John S. Darcy, sworn:* . . . I have met with many persons of defective mind; they are frequently cases of temporary derangement from violent causes; great mental excitement has a tendency to impair the intellect of individuals; I have known persons lose the *balance of their minds*<sup>2</sup> from sudden mental excitement [true; but were not such persons predisposed by bodily disease, and was not that sudden mental excitement which made them lose their *balance*, rather the result of previous diseased organization, than merely a mental phenomenon?]; *the loss of reason gives strength to the nerves*. [This is interesting in two points; that the loss of reason gives strength to the nerves may be new to many readers, and if absence of reason can strengthen the nerves, then we should be able, by strengthening the nerves, to produce a loss of reason—important in a therapeutical point of view. The only explanation of the phenomenon to which the doctor alludes, that insane persons sometimes make great bodily exertions, is by accepting that the diseased portion of brain which presides over the reasoning faculty communicates its diseased action to that portion of the brain which presides over volition.] . . . Loss of money or property is very frequently the cause of *mental derangement*, and also the loss of character. [We would beg leave to suggest that the cases of insanity following loss of money or character, are *very* few indeed in proportion to the number of persons who lose both money and character and remain sane, and that hence, in cases where insanity follows such a loss immediately, it has previously existed in a latent form.]

*Gov. Pennington* (counsel for defence): Suppose a female about 19 should be seduced by a lover; should believe herself pregnant; should be abandoned; continually weep; threaten to destroy herself; dwell continually upon this subject; should be excited; the same lover to marry another person; be found around the house in which they were; is there enough in this case to produce aberration?

*Witness:* I should think in a violent case of that character, where self-destruction was meditated, that it must be a strong intellect indeed, which would so keep its balance, as to be free from a certain state of derangement or *frenzy* of mind, arising, NOT FROM BODILY DISEASE, but from mental excitement. . . . It is very difficult to determine in cases of great mental disease what is done *with* reason, and what is done *without* reason. [While we say that the insane has a reason for everything, he does as well as a sane man.] . . . An insane person would be likely to pursue any person who had anything to do with bringing about this state of mind. [Not quite so fast, doctor; this is not at all a general rule; the religious insane, who form a considerable bulk of the in-

<sup>1</sup> The case alluded to is that Margaret Garrity for the murder of Edward Drum. We quote from the full reports of the *Newark Daily Mercury*. October 11, 1851.

<sup>2</sup> *Italics our own.*

sane, in and out of the lunatic asylums, are generally *rather* attached to those who were more directly concerned in bringing about this state of the mind.] . . . . .

*Mr. Whitehead* (counsel for defence), after relating all the particular circumstances attending the prisoner's conduct during the two weeks previous to the occurrence, and immediately afterwards, as it had been produced in evidence before the court, asked the witness: What was your opinion of her insanity?

*Witness*: I should think, that under all these circumstances, she must have been laboring under *something morbid* (the reader will please to remember, that the doctor does not mean bodily disease), either temporary mental derangement or such a *violent frenzied state of mind* as ought to make her free from all responsibility for her acts on that particular night.

In adducing this testimony, it was not our object to raise the question of Margaret's insanity, though that might be done with impunity, but we only wished to contrast its looseness, want of precision, and lack of scientific foundation with the intelligent, clear, precise, and scientific points of the medical testimony in Huntington's case. Had the prisoner in this case been a man instead of a woman, and the sympathies of the public, the court, jury, counsel, and *prosecution* been against the prisoner instead of in her in favor, this testimony would have been received for what it was worth, and treated with well-deserved ridicule, to say the least of it. But is the public to blame; are judges and jurymen to blame; if "fancy run mad" is received as ocular wisdom, when the accused is a female and the crime murder, while "truth transparent" is received as flimsy theory, when the prisoner is a male, and the crime forgery? No, we need not arraign them for such perversions of justice; the cause lays at home, at the doors of our own profession. As long as the profession silently permit medical witnesses to spread opinions broadcast over the land, which ignore and defy the present state of science; if statements opposed to established facts, as well as to sound sense, are permitted to go as evidence without even an attempt toward a protest from the profession; so long must the life, liberty, and peace of the innocently accused or the punishment of the alleged insane, depend upon a mere lottery of circumstantial good luck, instead of upon truth and justice eternal.

We have said, that this point of materiality of insanity is an important one. It is in fact the only platform upon which the physician as such, can logically appear as a witness in insanity. Deny that insanity is a disease of the brain, and what more qualification has the physician to analyze the phenomena of insanity, than the philosopher, divine, or lawyer? Ay, less! The metaphysician ought to have a better insight into the *mere mental* operations than the physician; the lawyer ought to have as sharp an eye to view more mental phenomena, as the physician, and the divine whose avocation is based entirely upon the spiritual nature of man should be the best judge of all. What then is the distinctive mark between the physician and the rest? It is this—the philosopher studies little their causes, while he investigates mental processes; the lawyer and divine both analyze the manifestations of the mind and soul, but they heed not that a blow upon the head, a ruptured vessel in the brain, softening of its hemispheres, causes the manifestations of the mind to change or to cease altogether. When the plea of insanity is set forth, society does not wish to know whether a man is capable to reason according to the laws of logic;

if so, the metaphysician would be called upon the stand : society does not wish to know whether the alleged insane is sound on dogmata or articles of faith, else the clergyman would be the person to give an opinion ; but society wishes to know, *whether the physical organization of a man is such, that he is able, or was able at a given time, to exercise his will in a state of freedom : and to testify upon any other basis, the physician should always refuse.*

The physician knows, that if a certain portion of the brain is removed, though the ganglia of the various senses remain, all power of intelligent volition is lost. He also knows, that if the portion of brain in which the will resides be affected with disease, the manifestations of the will must be abnormally modified according to the nature and severity of the disease ; he knows that in the vast majority of cases of insanity the connection between the mental manifestations and their causes can be directly traced to a diseased condition of the brain ; and he knows that a perversion of the senses, of the will or intellect, which annuls the freedom of will, can only be produced by one of two things ; either by disease of the brain or some other portion of the nervous system, or by a miracle ; miracles, however, are not taken in evidence before court and jury, though the time was, and is to a certain extent yet, when the ignorance of physicians, or the superficiality of their post-mortem examinations was covered with the solemn verdict of "a visitation of providence." Judges and prosecuting attorneys are very quick in pronouncing medical testimony on insanity as mere theory, sheer hypothesis, flimsy supposition, and by way of comparison they are fond of alluding to the "well settled" principles of law in regard to insanity, which have stood "the test of time." This "test of time," however, reminds us of those corpses, which when embalmed and preserved in air-tight coffins, stand the test of many centuries, but as soon as they are brought to light, crumble into dust. The lawyer assures us, and so does the judge, that it is a flimsy theory when the physician asserts, that insanity is a disease of the brain. But, sir, this theory, if so you choose to call it, is supported by an immense accumulation of facts and experience. "I have nothing to do with your facts and experience, the principles of law have stood the test of time." What shall medical men answer to such obstinacy ? Is a theory correct and true because it has existed for a long time ? Was heathenism true because it had the "test of time" for many centuries, until Christianity conquered its deities ? No ! the very allusion of those who deny the materiality of insanity to the old age and venerability of their unsupported theories and assertions, should fill us with suspicion. For the last reason which always induces men to defend false theories, erroneous principles and bad institutions, is their very age and venerability. We may close this part of our notice with the simple statement, that so far as we have been able to find, the case of Huntington is the first in the United States, where the medical witnesses asserted and established the materiality of insanity, as a scientific principle, and thereby also established the legitimacy of medical testimony in insanity.

The second point of importance in the testimony of Drs. Parker and Gilman, is the question of moral insanity. It may at first sight appear somewhat strange, that the very men who hold that insanity means disease of the brain, should accept the existence of such a thing as moral insanity, because we often speak of the moral nature of men as opposed

to his physical nature. But the apparent contradiction is easily solved when we look, not at the mere term, but at the thing which the term is meant to imply. By moral insanity is understood simply a morbid state of the brain, excluding the freedom of will without an apparent disturbance of intellect; a condition of the brain by which a man is *forced* to an act, though he know that act to be wrong. The cases adduced by Dr. Gilman in his "medico-legal examination of the case of Ch. B. Huntington" established this point beyond the shadow of a doubt—not as a theory, but as a positive fact, and we earnestly solicit every member of the medical, as well as the legal profession, to possess himself of the pamphlet, and dare after his perusal to pronounce moral insanity but a fable. Why, this moral insanity is as common as any other form of insanity, only not so generally recognized, because it more frequently manifests itself in small matters and minor wrongs, which do not become the subject of judicial interference or criminal prosecution. There are men who pertinently tell lies; they are aware of the wrong they commit in doing so; aware of the consequences, but still they will lie; lie a man out of his own existence if they can. The mode in which this moral insanity manifested by lying is brought on, can often be traced to the habit acquired in early childhood, to amuse or being amused by "strong" stories. This habit becomes finally so interwoven into a man's very existence, and, for aught we know, into his brain, that he cannot, if he would, resist the impulse to lie. What was sane immorality at first, becomes moral insanity at the end. A man may, by repeatedly doing a certain act, produce such a condition of his brain, that this very condition will force him to repeat the act again, and again, though he is perfectly well aware of the wickedness of the act and its consequences. Poor Edgar A. Poe; all his poetical and intellectual powers did not prove barriers against that horrible affliction, moral insanity, which creeps into the brain unfelt, unseen, makes man a brute, he knows not how, makes him a devil, he knows not why.

Still, another series of cases in the history of crime, showing that insanity *can* exist without loss of intellect, and with the knowledge of right and wrong, are cases of suicide. Self-preservation is the first law throughout the living world, and disease only can destroy that innate desire in man, and supplant it by the desire of self-destruction. Who will say that a man with a sound body and a healthy brain, whose freedom of will is thus unimpaired, will meditate and commit suicide? The very idea is preposterous. But while those who commit suicide are insane, as insane as man can possibly be, have they not, except when the deed is done in the wild delirium of an acute disease, full power of reasoning, full knowledge of right and wrong? Is it necessary to quote the letters of such unfortunate beings, full of intellect, and closing with the words, "May God forgive me!" Does not this clearly show that insanity is compatible with the possession of intellect, and the knowledge of right and wrong? What then are the bearings of the medical testimony in Huntington's case? We answer—

1. It has established the legitimacy of medical testimony in insanity, on a basis of positive science.
2. It has for the first time on this side of the Atlantic brought before court and jury, the *fact* of moral insanity, and thereby
3. Exposed the utter fallacy of the present principles of law, in regard to insanity.

Achievements of which any man, however high he may stand in professional eminence, may justly feel proud.

(Space and time do not permit us to touch the moral and practical points of the question on this occasion.)—*N. J. Medical & Surgical Reporter*.

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*On "Phantom Tumours" of the Abdomen.* By E. HEADLAM GREENHOW, M. D., Lecturer on the Public Health at St. Thomas's Hospital Physician to the Western General Dispensary, etc.

I desire to bring under the notice of the Society a kind of abdominal tumor, often most embarrassing to the practitioner, and very alarming to the patient, but of which I have been unable to find an account in any publication with which I am acquainted. We are indebted to Dr. Addison for the elucidation of the true nature of these tumors, and, in speaking of them, I shall adopt the name "phantom tumors," which he is accustomed to use in his clinical teaching at Guy's Hospital. During an experience of many years, I only remember to have met with seven or eight cases of the kind, in each of which I was expressly consulted for the tumor, and not for the derangement of health with which it is invariably associated. Probably, as the disordered health on which they depend is of very common occurrence, I should have met with these tumors more frequently had I sought for them. The five cases, the main features of which I intend briefly to detail, had all but one been seen by other practitioners before I was consulted. In the investigation of this excepted case, I had, as will subsequently appear, the benefit of being assisted by a leading metropolitan physician.

The first case of the series came under my notice so long ago as fifteen or sixteen years. The subject of it, a married lady aged twenty-six, had already borne several children, was in delicate health, and suffered especially from uterine derangement. She was anæmiated, unable to take active exercise, and complained much of anomalous pains, and of tenderness along the course of several large nerves. The greatest source of anxiety, however, was the presence of a tumor in the right lumbar region, apparently about the size of a cricket-ball, but less regularly round. It appeared to be movable, and if attached posteriorly, to be so only by a narrow pedicle. The impression that it conveyed on a manual examination was that of a loose body floating upon or amongst the viscera. In character, the tumor was firm and unyielding, free from tenderness, and somewhat changeable in site; for although invariably to be found on examination, its precise relative position varied a little from day to day. I have neglected to note how long the tumor had existed, but several opinions had been taken before I was consulted, and the lady had gone safely and without inconvenience through a pregnancy since its discovery. She had been recommended to place herself in the hands of an eminent surgeon, with a view to the extirpation of the tumor—a procedure to which I most strenuously objected. I have not seen the lady since, but

I know that she has subsequently borne several children, and I learnt several years ago that she was in better health, and had undergone no operation; she is, I believe, alive at the present time. The treatment I adopted—chalybeates, and other means likely to improve the general health—was just what I now believe to have been best suited to the case. It would, however, have been most satisfactory to my patient and her family and very conducive to my own reputation, if I had been able to explain the cause of the tumor, respecting which they were so anxious, and to assure them that it was but a symptom, and an unimportant one, of a troublesome and tedious but not dangerous malady. Although I was unable to form any satisfactory diagnosis of the nature or connexions of the tumor in this case, its history served to teach me that there is at least one kind of abdominal tumor that leads to no ill result, and requires no interference—a lesson by no means devoid of practical value.

The next case, which did not present itself until after an interval of several years, was very similar to the preceding one. It also occurred in a married lady, about thirty years of age, who had recovered imperfectly from her last confinement, suffered from profuse leucorrhœa, and was very feeble and unequal to exertion. The tongue was furred, the appetite bad, and the action of the bowels irregular, diarrhœa alternating with constipation. "Has occasional qualmishness and nausea, frequent occipital headache, and suffers much from abdominal pains unaccompanied by tenderness. She also complains of a contracted sensation across the abdomen." The tumor, which in this case was likewise on the right side, appeared a good deal larger than that already described. Although at first disposed to view it as an ovarian tumor, I abandoned this idea upon a more careful examination, being partly influenced by the circumstance that, although a tumor, apparently as large as a full-sized foetal head, very plainly existed in the right Iliac region, the abdomen, on careful measurement, was found not to be really larger on that side. Another very remarkable feature in the history of the case, of which I was assured by the patient herself, but the correctness of which I confess to have doubted,—was that the tumor had entirely disappeared previous to and during the period of her last pregnancy, notwithstanding she had been under treatment for it at an anterior time. Although in a somewhat different situation, I at once referred this case to the same class as the last, and expressed a hope, based upon that experience, that, however troublesome, the tumor would not prove of any serious consequence. This lady is alive, and in the enjoyment of very tolerable health. She has borne several children since the time of my attendance, but of the tumor I know nothing beyond the fact that it has, as I predicted, led to no unpleasant result.

The third case is that of an unmarried lady, aged between twenty-five and thirty, who was believed to be in a state of hopeless ill-health when she came under my care. The tumor closely resembled both those already described; was more fixed in situation, being in the right hypochondrium; was less movable under examination, and seemed about the size of a large orange. The more prominent symptoms of illness were evidently referable to spinal affection, and under treatment directed to it my patient slowly and gradually recovered. Although I did not at that time understand the connexion between these tumors and spinal disorder, yet relying upon the harmlessness of the tumor in my two previous cases, I treated it as of secondary importance.



The case to which I am now about to refer is, perhaps, the most interesting of the series, for it clearly shows the really unimportant nature of these tumors, and yet how very easily they may be mistaken for examples of serious disease. Mrs. —, aged forty-four, having borne a family, had suffered for several years from menorrhagia alternating with profuse leucorrhœa. She had also suffered from a variety of other ailments referable to spinal irritation, itself due, I do not doubt, to the disarrangement of the uterine system. I was consulted by her, somewhat more than three years ago, for a tumor in the left hypochondrium, the appearance of which had been long precoded by occasional attacks of pain in that situation, of such intensity as to make her writhe about in bed, and for the relief of which opiates, even in large doses, were of little avail. This pain was of paroxysmal character, often coming on very suddenly, and sometimes without apparent cause, although more frequently as a consequence of over-exertion. It sometimes lasted for many days without intermission, but with variable intensity. The employment of counter-irritation to the spine, and of tonic treatment calculated to improve the general health and lessen the uterine flux, were of essential service; and when, at a subsequent period, I sought for the tumor it was not discoverable. After an interval of many months I was again consulted for the tumor, which sure enough, had very evidently returned, and is described in my notes of the case as "an ovoid movable tumor, free from tenderness, and apparently floating loose in the left hypochondriac region; it is difficult to estimate its size, but it appears to be somewhat reniform, and at least twice the natural size of a kidney." It is further added that the patient was in all other respects in good health; that no fulness, tenderness, or pain existed in the posterior lumbar region, and that the urine was normal. Notwithstanding that I believe the tumor to be of the same character with those already related, I thought it desirable that the patient should have the benefit of a second opinion, particularly as I had been unable to find it on a previous occasion. An eminent physician who was called to my assistance devoted much pains to its elucidation, but without arriving at any more satisfactory conclusion as to its nature than myself. We agreed that it could not be ovarian, from its position; that it was too movable for an enlarged kidney, which was also discountenanced by the absence of any unusual fulness, resistance, or tenderness posteriorly; and that it had not the character, neither had the patient the aspect of malignant disease. Although in great doubt on the subject, we treated it on the supposition that it might eventually prove a hydatid growth. Some time afterwards other symptoms of spinal irritation manifested themselves; and although I had never seen an avowed case of Dr. Addison's "phantom tumors," I began to suspect that this would prove an example of them, as it subsequently did. The patient, very shortly after the consultation went from under my immediate observation, although she continued to act under my instructions. In the course of a few weeks she wrote me word that the tumor had dispersed; and a few months ago, being again in town, she afforded me several opportunities of satisfying myself that the tumor really was gone.

A few weeks since, I was called in to another case of the same description, which has entirely removed any lingering doubt in my mind as to the nature of these tumors. The patient aged thirty-nine, and married for many years without ever being pregnant, has suffered for sixteen or

seventeen years from dysmenorrhœa and from several of the various anomalous affections so frequently found in association with uterine functions. She is very prone to attacks of what she calls spasms of the heart; but the ailment which causes most anxiety is a tumor in the left side of the abdomen, just below the margin of the ribs. The tumor is analogous to those already described; is movable, firm, and free from tenderness; but on a careful and somewhat prolonged manipulation, partly frictional, partly kneading, it seems to melt away under the fingers. On examination, very considerable tenderness was found to exist for the space of an inch and a half near the centre of the dorsal vertebræ, pressure by the sides of which produced pain in the chest, and also pain extending round to the left side. Entertaining not the slightest doubt that the tumor here is really a phantom, I have turned my patient's thought from its consideration, assuring her that it is unimportant, and am directing my treatment to the alleviation of the spinal irritation and to the improvement of the general health.

In considering the history of the cases I have described, it is noticeable that all of them were females suffering from some disturbance of the uterine function; and that whilst spinal irritation unequivocally existed in three of the patients, its presence may not unfairly be inferred in both the others. Although I have not myself seen any examples of these "phantom tumors" in the male subject, I can easily believe that they may occasionally occur under the influence of slight forms of spinal disease. I half suspect that a medical friend of mine, since dead, who had a tumor in the right hypochondrium, which disappeared for many months, during which he was in the enjoyment of good health, and re-appeared at a subsequent time *pari passu* with a return of former bad health, was really the subject of one of these "phantom tumors." That such occurrences are much rarer in men, is readily explicable when we recollect the rarity in them of spinal irritation, of the multifarious symptoms of which these tumors are amongst the most important, since, if not understood, their presence may, as in several of the cases I have related, readily lead to the belief that the patient labors under some very serious disease—ovarian, malignant, or cystoid. The real nature of these tumors is spasmodic; their seat probably the abdominal muscles; for although in every instance I have seen, the tumor appeared to be in the abdominal cavity, the melting away of my last case under manipulation is inconsistent with the belief that they are very deeply seated. Their cause is spinal irritation, the irritated spinal nerves producing spasm in the muscles to which they are distributed. I need scarcely observe how entirely this explanation of their character is in keeping with the history of the tumors in the foregoing cases. If it be admitted that they are formed by the spasmodic contraction of portions of the abdominal muscles, it is no longer matter of surprise that patients suffering from their presence should pass safely through pregnancies; that the tumors should cause no actual enlargement of the abdomen; that they should sometimes disappear spontaneously; that having thus disappeared they should sometimes return; that they should be removed under the use of remedies calculated to improve the general health, and to remedy the cause of the local irritation to which they appeared referable; that they should change their relative position from day to day; or, lastly, that they should be temporarily dispersed under the manipulating hand of the physician. In

confirmation of the apparent reality of their presence, and of my assertion as to the embarrassment and anxiety they cause to the practitioner who is ignorant of their true nature, I may point to the fact that the abdomen has been laid open by the surgeon at least five times for the removal of abdominal tumors which were found not to exist. Most probably all of these were really examples of these "phantom tumors;" and yet the reality of their existence must, in each of these cases, have been impressed upon the minds of the patients and their relatives, as well as upon that of the operator and his colleagues, before he would have proposed, or they acceded to, so very serious an operation.

I should have been unwilling to bring this subject before the Society in so incomplete a form, and probably would have left it to an abler hand, had I not learnt in conversation with several friends of wide experience, that they had likewise met with examples of these puzzling tumors, without being aware of their true character. I trust that even this imperfect sketch may lead to the clearer elucidation of the subject by directing the attention of other observers towards its investigation, and may serve to avert some of the anxiety and doubt felt by myself when the earlier cases came under my care, as well as of the uneasiness experienced by persons suffering from a disease apparently of a serious description, but the precise character of which is unknown.—*London Lancet.*

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*Of Sudden Deaths in the Puerperal State, from Dynamic Lesions of the Nervous Centres; read before the Medical Society of Bordeaux, the 19th of January, 1857, by Dr. CH. DUBREUILH. Translated, by the Editors, from "The L'Union Medicale de la Gironde."*

The study of sudden deaths in the puerperal state has not received much attention in works on obstetrics, even the most recent. With the exception of some observations, published recently, calling attention to the possibility of this fatal termination, we have but divers and contradictory opinions to explain it. I do not intend, gentlemen, to discuss, at present, but one of the points still obscure, of this great question, whose history I intend to write some time hence. The subject of the present meeting will be the dynamic lesions of the nervous centres, which may induce the sudden death of a woman who is in labor, or who has been delivered for a longer or shorter time. I will include all those cases in which death has taken place suddenly, without any cause whatever being found in the apparent state of the nervous centres or other organs to explain it.

Every thing leads us to believe, says M. Aran, in his excellent thesis for the *aggregation*, that, in some of the cases, there ought to exist lesions, which science will discover one day. But there are some in which we will be forced to admit an intimate lesion of the nervous substance, a lesion momentary and transient, whose effects may be promptly fatal, in which the cadaveric examination will not afford us any traces.

Several years ago M. Channet, in one of his clinical lectures, mad

the remark that, among four hundred and fifty individuals who died at Charity Hospital, he had seen seven die in a way quite unexpected, without the most careful researches affording any thing which could explain the quick and fatal termination. The subjects of these observations were all young women, but recently delivered, whose condition apparently was the most satisfactory.\* When a woman has conceived, a profound modification of the entire organism takes place, which exalts her sensibility, and renders her more susceptible and more impressible to the action of physical and moral agents. It is this modification which constitutes the puerperal state, a condition produced by conception, developed by the pregnancy, augmented by the pains of labor, prolonged and debilitating during nursing, and not ceasing until the woman has resumed the habitual condition. In the production of sudden deaths in the puerperal state, the physician must never lose sight of the important rôle which the nervous system plays as an agent of transmission. If the boldest theory can not always imagine or discover a cause there, or the cadaveric examination does not afford us any trace of the lesion, physiological and anatomical investigations can, at least, aid us a great deal in its conception.

We range in the class of sudden deaths by dynamic lesions of the nervous centres, the cases in which death has taken place suddenly in consequence of syncope, of pain, and of a high moral emotion.

1st. *Syncope*.—There is nothing more frequent than syncope during the puerperal state. This morbid phenomenon is observed often during pregnancy and labor, and sometimes at a time more or less prolonged after delivery. We have seen many times feeble or nervous women fall into syncope from the most trifling cause, and sometimes without any known cause. This condition may occur often, especially in the first months, and is always very alarming to those who are present, being very often fatal, especially after delivery. In the absence of appreciable anatomical lesions, syncope is one of the causes which has been the most frequently supposed to explain the sudden death in the puerperal state.

The energy of the brain, says Cullen, being evidently, on different occasions stronger or weaker, it seems that its action can not augment without being necessarily followed by a state of debility. We may consequently understand, according to this law of nervous power, how the sudden and violent action of the energy of the brain is sometimes followed by such a diminution in the force of this energy, that it produces syncope and even death. It is in this way, I suppose, according to the same principle, that an acute pain may sometimes augment the energy of the brain to a degree more considerable than it can support, from which there results a diminution of force which must occasion fainting. But the consequence of this principle becomes more evident at the time of the syncope, which supervenes easily, when a severe pain ceases all at once. It appears that it is in a manner entirely analogous, that syncope succeeds instantly on a violent effort, continued for a long time, whether this effort is voluntary or depending on a particular disposition. It is, also, in this way that syncope attacks a woman during labor.†

Bichat believed that syncope affects the brain secondarily, and that it

\* Clinique des Hospit., † 2 p. 154.

† Cullen. Compend. de. Med.

is the heart whose action is first interrupted, determining by its momentary death the deficiency of action in the brain. From the different considerations in which he has viewed this subject, he concludes that the primitive source of the disease in syncope, is always in the heart; that this organ does not cease to act at that time because the brain is interrupted in its action, but that this latter dies because it does not receive from the former the fluids which habitually stimulate it, and that the usual expression *mal au cœur* expresses, with exactness, the nature of this disease.

Several modern authors agree with M. Bichat. M. Piorry believes that the circulation holds the first rank in the order of the causes of syncope, sending no longer to the brain a stimulating liquid; from this there follows a suspension of the functions of the encephalon, and, consequently, more nervous influence is sent to the heart, which arrests it and produces death. The uncertainty of the causes of sudden deaths in the puerperal state has led M. Robert to ask of the Surgical Society, "If we should not seek the disposition in that chloro-anæmic condition observed recently by M. Cazeaux in a great number of women during pregnancy?" Among the facts that this Surgeon has observed he thinks a chlorotic state existed.

The augmentation of the fluidity of the blood, which hematological researches attributed to the augmentation of the quantity of water, coinciding with a general diminution of organic materials, correspond to these morbid states designed under the name of chlorosis and anæmia. It is to M. Cazeaux, an eminent correspondent of our Society, that we owe the explanation of a great number of accidents of the puerperal state which, until very recently, were attributed to an augmentation of the coagulability of the blood or plethora.

"We have sought to verify by facts," says this distinguished academician, "the value of the indications that we have deduced from the documents furnished by the experiments of two learned professors, M. M. Gavaret and Andral, and we must say that practice confirms the theory. It is, also, with an entire confidence that we proclaim boldly, to-day, what we affirmed timidly in a simple note; the hydræmia is, in pregnant women, the most frequent cause of functional troubles attributed, until the present time, to plethora."

It is established from the table, which M. Regnauld has given in an excellent thesis, that in pregnant women, not only the serum is found in greater abundance relative to the fibrine and globules, but that it becomes itself less rich in solid parts, which necessarily contributes to increase the total mass of water which the blood contains.

These results of chemical analysis, as also the physical qualities of the blood agree with those which we find in women in the puerperal state; on the other hand, chlorosis and anæmia being essentially characterized by the diminution of its globules, and the augmentation of the water, it is rational to conclude, that all these functional troubles, observed during pregnancy, ought to be attributed to chloro-anæmia; they are, besides, identical with those which have been observed in chlorotic women.—These considerations, and the existence of chloro-anæmic state, are not indifferent for the subject which occupies us; for with subjects prostrated by losses of blood, or by abundant evacuations, whatever may be their nature, in chlorotic persons we have seen sudden death take place in a

very unexpected manner, and in the most various circumstances. This particular condition of the blood may, in the special circumstances of the puerperal state, have an immense influence in the production of these mortal syncope, and become the cause of sudden death. To this particular state of chloro-anæmia, in the pregnant woman, may be very rationally attributed several of these fatal terminations, in which the scalpel has failed to find any trace of appreciable lesion.

It is justly, according to M. Devergie, that this want of pathological alteration coincides always with death by syncope, which forms, so to speak, of its characters, one of its concomitant circumstances. Very often syncope will be a result entirely mechanical, an effect of the sudden withdrawal of the blood from the brain; the nervous center falls then into a nervous collapse, in consequence of which syncope, and even death may supervene. This may be the cause of syncope after accouchement. In effect, the uterus, assuming then, rapidly, dimensions smaller than those which it had during gestation leaves a free expansion, to the large vessels of the pelvis, and then a very powerful sanguine raptus takes place in this region, at the expense of the liquid which nourishes the superior extremities; this is a very different cause from that of a syncope coming on after a hemorrhage. The accoucher, says M. Cazeaux, must know, that the syncope which come on after delivery, are not always the result of a hemorrhage; we have observed it quite often in consequence of very rapid labors. The womb being emptied suddenly, the hypogastric vessels cease immediately to be compressed as they were during the latter months of gestation; the circulation becomes more free and easy, and the rapidity with which the blood abandons the head and inferior extremities, to flow into the vessels of the inferior abdominal regions, produces syncope very often.

*Observation 1st.* The young wife of one of our confrères was affected, during the last three months of her pregnancy, by vomiting, so stubborn that she could retain nothing. Continued fever followed, with nocturnal paroxysms, with great loss of flesh, and prostration. She completed the term of a very painful pregnancy—the labor lasted ten hours. During the stage of expulsion, which lasted four hours, an imperious duty obliged me to absent myself. Immediately after the spontaneous termination of the labor, the unfortunate woman had a first syncope; and, although the uterus properly contracted, did not allow any hemorrhage, she expired three-quarters of an hour after, in spite of the internal and external use of the most powerful tonics.—*Cazeaux*, p. 814.

This same mechanism of syncope holds good when it manifests itself during labor, and when it is followed by death. The loss of a great quantity of water has the same effect of emptying, suddenly, the uterus, and producing a syncope analogous to that which is observed in cases of abdominal paracentesis.

*Observation 2d.* A poor woman of Charity Hospital had been in labor since five o'clock. The membranes ruptured, a great quantity of water escaped, and from this time she felt excessively weak. Feeling the desire of using the night-vessel, she sat upon it, and made some expulsive efforts, and fell over in a syncope. She was immediately placed in a horizontal position; but she was scarcely laid upon the bed before she was dead. At the autopsy nothing was found to explain the death.—*Davis*.

When sudden death takes place, a longer or shorter time after delivery, the result of the experiments of MM. Piorry and Marshall Hall, on the production of syncope, is perfectly applicable. Two things may then produce it: a deficient excitation of the cerebral substance by the deviated blood, by reason of the equilibrium of weight, from its normal course, and the sitting position. Often, indeed, as the following observations prove, it is at the moment when the patients raise up, or when they are raised, that these terrible accidents take place. One of the most curious results, in regard to deaths of this kind, says M. Aran (thesis cited), is the influence of position. Some animals who appeared dead, were re-animated by placing them in a horizontal position, or by placing the head lower than the rest of the body. Some individuals, weakened by suffering, whose blood has been impoverished, faint as soon as they assume the erect position; if they are permitted to remain in the standing or sitting position they do not recover their senses, but lying down they recover immediately. This suspension of cerebral innervation may be followed by the definite suspension of the other functions—a suspension which nothing can remove. We have then the origin of the deaths so frequent in convalescence after accouchement.

*Observation 3d.* A young woman, 25 years of age, the mother of two children, being much agitated on account of political troubles, decided to go to Versailles to be delivered. She was very happily delivered; nothing unusual occurred; her health was perfectly good until the ninth day, when sitting up in bed, about to eat something, she fainted, and died immediately, in spite of the usual means. (Dehous, thesis 1854.)

*Observation 4th.* M. Robert has seen two such cases. A young woman, who was not a *primipara*, died the sixteenth day, although still in bed, while making some part of her toilet.

*Observation 5th.* Another woman, the mother of several children, died on the 16th day, when she began to take her breakfast. No autopsy was had. (*Surgical Society*, meeting 7th January, 1852.)

*Observation 6th.* An accoucheur was called to attend a young woman, pregnant with her first child, and at term. The labor had commenced, and while he withdrew for some time, a syncope came on, without any known cause. On his return this fact was communicated to him; but, as the patient appeared perfectly well, no attention was paid to it, and the delivery took place without an untoward symptom. Three days afterward, she took a purgative, and while at stool she fell over, and expired immediately. (Merriman, *Union Medicale*, 23d June, 1853.)

In a memoir, entitled "Researches on Sudden Deaths in the Puerperal State," published by Mr. McClintock, of Dublin,\* we find some remarks on a morbid state, described by the name of idiopathic a-phyxia, which is perhaps but a syncope. Idiopathic asphyxia, says Chrystison, causes death, almost instantaneously, in some minutes, or rather, in some cases at the end of an hour and a half. The symptoms are those of syncope. The only alteration which is found in the cadaver consists in the flaccidity of the heart, with an almost entire emptiness of its cavities. In the original memoir, which he has published, on this disease, in the first volume of the *Medico-Chirurgical Transactions*, M. Chevallier relates the case of the sudden death of a lady, three hours after she had been delivered of twins. He made an autopsy, and from what he observed he was

\* *Union Medicale*, 1855, p. 294.

led to conclude, that death could only be attributed to this particular form of asphyxia.

The same author reports, from Morgagni, a case of rapid death in the puerperal state, which seemed to be owing to the same cause. M. Backer gives an account of two cases, which support the preceding. In these two cases, death supervened quite suddenly, when it was least expected, a few days after delivery. At the autopsy no other condition could be found to explain the death, than an abnormal flaccidity of the heart, with complete absence of blood in its cavities. If we admit this cause of death, adds McClintock, we do not see why it may not attack puerperal women. Much more, if we admit, as certain persons do, and as I am not far from believing, that idiopathic asphyxia is nothing else than a variety or form of syncope, we must be still more disposed to admit the possibility of its production in women in the puerperal state; that is to say, in a state in which their constitution is already weakened by the parturient act, and which has for one of its chief characteristics, an abnormal disposition to morbid action, a particular excitability of the vascular system, and a pathological susceptibility of the nervous system. It requires several days for women to recover from the shock produced by labor, and during this period, whose duration varies, necessarily, in different circumstances, the vital resistance is diminished. Consequently, all kinds of impressions, which affect the body or mind, surprise the economy in much less favorable conditions. For all these reasons, it seems to me impossible not to admit, that several cases of sudden death, in the puerperal state, still unexplained, must be attributed to idiopathic asphyxia, or to a syncope.—*Cincinnati Medical Observer.*

[TO BE CONTINUED.]

### *Questionable Advertisements.*

Under the above head, the (Philadelphia) American Presbyterian has a most excellent article, condemning the practice of admitting into the columns of public prints those objectionable medical advertisements with which our papers are flooded, and which are so injurious, both to body and mind, in their tendencies. It is not a little remarkable, that our journals, all of whom profess to uphold the cause of morality, if not of decency, should generally be silent upon the subject of so great an outrage. Even the large sums which are paid for the insertion of such advertisements should not, one would think, be sufficient to silence almost the whole press, on a subject of so much interest to the welfare of the community. There is not a city, and hardly a town, in our country, in which one or more newspapers are not printed, containing habitually advertisements which, if not grossly indecent, are the most barefaced impositions. Men subscribe for journals whose columns are filled with announcements which cannot be read by their wives and daughters without feelings of shame and indignation, nor by their sons without danger.

It is not our province to point out the moral evils which inevitably



follow this state of things; but in the name of the profession, in the name of humanity, we tender our thanks to the Presbyterian for its remonstrance against the practice of admitting into newspapers advertisements which hold out delusive hopes to the sick, and after inducing them to spend their money for worthless, if not pernicious compounds, leave them in a worse state than before. We are aware that our motives will be misconstrued by some; that our indignation may be prompted by the jealousy occasioned by the success of "illegitimate" medicine. The charge is simply absurd. Individuals may be occasionally injured by the success of empirics, but as we have stated before now, the profession is indirectly, and many physicians are directly benefitted by the unfortunate consequences of taking quack medicines. It is the deluded public who suffer, a large portion of whom can only be made to believe, after they have been taught by bitter experience, that ignorant pretence, unblushing impudence, barefaced imposture, are but a poor dependence in time of need. We appeal to the respectability of our profession throughout the land, throughout the world, as a proof of the purity of our motives.

The journal from which we quote copies a number of advertisements, whose absurdity would provoke laughter, if it did not excite our pity that such transparent frauds should be played off on the public, with hardly a remonstrance from the press, which, on the contrary, in too many instances strongly recommends them to the patronage of the public.

"We take up a paper," says the Presbyterian, and "as we read we find the announcement that a certain person offers his '*Cancer Drops and Ointment*' to those afflicted with cancer and scrofula. With more modesty than ordinarily characterizes the vender of such nostrums, he only asserts that it is a 'safe and generally certain remedy for such diseases.' Now, are the editors of that paper so grossly ignorant as to believe that cancer or scrofula can be cured by 'ointment and drops?' Do they not know that thousands are sent to premature graves by drugging themselves within, and plastering themselves without, with such nostrums?"

We subjoin another extract:

"But, as if this were not enough—and how strange it is that with such a remedy any other should be in demand—we have, in the same paper, a disinterested individual, who has a certain cure for consumption, which he longs to give the suffering. Hear him:

"A retired physician, whose sands of life have nearly run out, discovered, while living in the East Indies, a certain cure for consumption, bronchitis, coughs, colds, and general debility. Wishing to do as much good as possible, he will send to such of his afflicted fellow beings as request it, this recipe, with full and explicit directions for making up and successfully using it. He requires each applicant to enclose him one shilling, three cents to be returned as postage on the recipe, and the remainder to be applied to the payment of this advertisement."

"Think of it! Consumption cured for 'one shilling' and a postage stamp!! No wonder that the editors desire to spread the glad tidings among their thousands of readers.

"How is it with our —friend? Is he engaged in the good work? Yes. He has a whole column, from the top to the bottom of his sheet,

filled by the advertisement of *one* enterprising vender of these precious remedies. Here is a priceless balsam, proclaiming its virtues in paragraph upon paragraph of human grandiloquence. Cough, bronchitis, asthma, all fly before its wondrous powers of expulsion. Even consumption cannot stand it.

“Before its delightful influence all chills, fevers, night sweats, blueness of nails, a hot, flushed skin, an uncertain strength, emaciation and decline—disappear like the poisonous dews of night before the glorious morning sun. This is no delusion, but a demonstrative fact, sustained by incontestable proof from all parts of the country.”

“If your difficulties lie in another quarter of the frame, you need not despond. We learn from the same source that anything, from Cholera to the bite of a rattlesnake, may be cured by a certain ‘Pain Killer!’”

“The editor, perceiving the desirableness of his readers not overlooking this invaluable medicine, favors them, under the head of

‘CHEAP LIFE INSURANCE,’

with a short notice of it, and of another equally useful remedy, in a space lying between the call of the Rev. Mr. — to the pastorate, and the marriages of the week!”

We heartily agree with the Presbyterian that the publishers of newspapers are responsible for what they send into the houses of their subscribers, and that the public may and should hold them accountable for the tendency of their *advertisements*, as well as for that of other portions of their sheet.—*Boston Medical and Surgical Journal and Medical Gazette.*

### *Somnambulism and Clairvoyance.*

[Abstract of an Address delivered before the New London County (Ct.) Medical Society, April 9th, 1857, by JOSEPH COMSTOCK, M. D., and communicated to the Boston Medical and Surgical Journal by vote of the Society.]

GENTLEMEN—In reflecting upon what subject to address you, the words occurred to my mind, *tell what you know yourself, instead of telling what others know.*

I began the practice of my profession in Rhode Island, in copartnership with Dr. Joshua Perry. Dr. P. was called to a girl aged about 15, then on Conanicut Island, near Newport, but whose parents resided in North Kingston. This girl stated that she had been bitten by a spider, and had strange fits, in which she inclined to strike her thorax with the ends of her fingers, and with such violence that her attendants placed their hands on her breast to prevent her hurting herself. But here commences a peculiarity of her case quite remarkable; it was this, that by touching the hands of persons thus placed, when her eyes were closely shut, she could distinguish one person's hand from another's and that she preferred the hands of her father to those of other persons, and would push a stranger's hands away, and feel for his.

This statement was made to me by Dr. Perry, before I saw her myself; and when I did see her, I witnessed phenomena still more rare and wonderful. It seemed as if the sight of her eyes was transferred to the ends

of her fingers, and this faculty was most impressively exemplified; for she could, and did, in my presence, by the touch and with her eyes closely shut, describe colors as precisely as any one could do with their open eyes, and even of complex mixtures. But to make the matter entirely clear, I had a pillow held closely before her face, without in the least impairing her faculty of describing colors. More exquisite still; by feeling the hands of different persons, and those persons afterward handing her a piece of money, she would, and did repeatedly, tell from whose hand it came. The propensity of preferring the hands of her father and other relatives, lasted for several weeks; when, like the changes, aversions, antipathies and unaccountable contrarieties of crazy and hysterical patients, it suddenly changed, and even the touch of any one of her kindred would increase her cruel spasms to a horrible height.

As some Italian writer (Baglivi, I believe) had recommended music for the fits, cramps and spasms of persons bitten by spiders, it was procured for Nancy, and when I saw her a second time it was made on a violin by an excellent performer. Music did not cure her convulsions, but it reduced them to order, and to a regular *dancing* system. She danced with all her might and main; spasmodically, laboriously, but involuntarily, and would thus continue the exercise till she was quite exhausted, unable to stand, and would fall to the floor unless caught and supported by some one. If the tune changed, so did her step.

The Italian physicians tell of curing *tarantismus* by music and dancing; but in the case of Miss Hazard it did not cure, but greatly alleviated, and after a month or more of suffering she finally recovered in as strange a manner as she had been afflicted. This was by the formation of an ulcer on the back of her hand, where she said the spider had bitten her, without any *cul de sac*, or abscess. The matter discharged was the greatest novelty; it was thick and green, and without any purulent, bloody, or serous hue, and exactly resembled the juice of green-corn leaves and sage, which dairy women used in making sage-cheese.

An account of this strange case I gave in a letter to one of my medical friends, who sent it to the editors of the *American Medical Repository* (in the year 1803), and in that first of all the American medical periodicals it was published, Hexadec the second, Vol. first, Article first, with more minute particulars than I have here entered into. It was from that work, as I have been informed, re-published in Europe; and by some was thought the strangest case on record.

But since then, the cases of Rachel Baker, Jane O. Rider, and Mrs. Cass (the two latter of which were published in the *Boston Medical and Surgical Journal*), exceed, perhaps, mine in point of marvellousness. I have supposed that this faculty of telling colors by the touch must be imputed to a transfer of the power of vision, or, if you please, a *metastasis*, from the eye to the fingers. In the case of Mrs. Cass, this power seems to have been transmitted to every part of the head; inso-much that no movement could be made in the room, even to the moving of a vial, if her back was toward it, but what she was sensible of and would notice and describe.

Bats are said to have this perception, which has been called the *sixth sense*. Dr. Pardon Bowen, of Providence, many years since informed me that the experiment had been tried, of digging the eyes of a bat entirely out, and then letting it fly in a room where cords and lines were made to

cross each other in every possible direction, and that it would fly clear of touching or coming in contact with a single one, or even hitting the walls or top of the room.

The transfer of the senses is not an affair entirely new, but being so extremely rare has not always been credited.

Dr. Rush, who seldom omitted to notice any fact, however strange, which threw a ray of light upon his profession, has noticed the case of a woman who lived near Lyons, who had a confusion of all the senses. She *tasted* with her *touch*, and *heard* with her *eyes* when her ears were closely stopped!

At one of my visits to Miss Hazard, I found her in rather a severe fit, lying on the bed, and witnessed her extraordinary tact, or diseased irritability, with respect to her blood relations, who had all become utterly obnoxious to her touch. At this time her intelligent musician thought, from her moving her feet, that she ought to be helped up to dance. At that instant one of her distant relations came in to see her; she was blind and speechless, and could not have known by her natural senses, that any one had entered. This relative hearing what was said about her being helped up, attempted to assist her, but the effect of his touch was an instantaneous increase of her spasms and convulsions, so that I for a moment was apprehensive of her immediate death. He was at once peremptorily desired to desist. Not being her relation myself, I helped her on to her feet, the music struck up, and I stood by her for about an hour and a half, during which she continued dancing with such violent and exhausting energy, that she would have fallen several times had I not supported her; but after resting a minute, not more, she would resume, or rather her modified convulsions would resume, the exercise with all vigor and energy. As none of her relations could now assist her in her fits, her family were compelled to procure those not akin to take care of her. It was even said that the presence of her father in the room aggravated the violence of her paroxysms. But when out of the fits, all this aversion, all this morbid sensibility of telling colors by the touch, of hearing a whisper in another room, and of smelling less than a drop of essence of lemon through two beds on which she lay, vanished all at once, and she was pretty Nancy Hazard again, who finally got well and got married.

I have already remarked that the cases of Mrs. Cass and Jane C. Rider might be more marvellous than the one which I saw myself, and some further particulars in relation to their cases may here be appropriate.

Dr. Belden's patient, Jane C. Rider, was called the Springfield somnambulist, and was visited by clergymen and great numbers of people. When she came out of a fit, nothing done or said in it was at all recollected; but when another paroxysm came on, she remembered what was said and done in a preceding one. Dr. Belden says, "Her natural disposition was mild and amiable; but in her paroxysms she was commonly peevish and irritable." She would repeat poetry in her fits which she did not remember a word of when out of them; her sleeping memory being better than her waking one. She could see equally well in the dark as in the light, and generally supposed it was day; as a proof of which, when it was bed-time, and she was reminded that it was time for her to retire, her reply was, "What! go to bed in the day-time!" Attempts made to arouse her from her somnambulism were uniformly unsuccessful; she heard, felt and saw, or at any rate discerned, but awoke

not. A pailful of cold water was once thrown on her, when she exclaimed, "*Why do you wish to drown me?*" went to her chamber and exchanged her dress, came down again, but awoke not. She had a pain in her head and an extremely tender spot upon it. Dr. B. took her to his own house, and there were usually from ten to twenty visitors in her room.

But her extreme and surprising faculty of discerning, so as to read with her eyes closed and in a dark room, claims our physiological notice, study and investigation; for, thus situated, she read a great number of cards, some of which were so obscurely written that the people with open eyes, and all alert, could scarcely make them out. "She told the date of coins, even when the figures were nearly obliterated," and threaded a needle for a lady who asked her, all with her eyes shut, and a handkerchief tied before them. And now, something like one hundred persons visited her in a day, and to "make the assurance doubly sure," another handkerchief was tied below the former, without any diminution of her describing what others could scarcely discern. Yet afterward, to further test her *sixth sense*, that of feeling without contact, and seeing when blinded, a large black silk handkerchief was folded, and cotton batting so introduced as to be directly over her eyes, and to fill the cavity each side of her nose completely; various names were then written on cards, by most persons in the room, and presented to her, which she read as soon as presented. One gentleman present wrote his name in so small letters that no one could read them at the usual distance from the eye. "As soon as the paper was put into her hand she pronounced the name."

On one occasion, in a room made so dark that not a ray of light could penetrate, the fire was extinguished, and the lamps carried out. Two books were then presented to her, one of which it was known she had never seen before, yet "she immediately told the titles of both."

About this time she left Springfield, and was received into the Insane Hospital in Worcester, and we now come to what that acute and talented observer, Dr. Woodward, reports, viz.: Her pulse was 72 in a minute, soft and small; the extremities were cold, and at the commencement of the paroxysm the sleep was disturbed by sobbing and groaning; the breathing was interrupted and anxious, and she was uneasy and in perpetual motion. She told time by a watch with her eyes closed. Her eyes were then covered with a thick cotton handkerchief, folded so as to make eight or ten thicknesses, and the spaces below the bandage filled with black velvet. A small volume was then put into her hand: "Jane began at the paragraph indicated, and read distinctly, audibly, and correctly, not, however, without a slight degree of hesitation at the most difficult words, nearly the whole page." A game of back gammon was then proposed, which she said she knew nothing about, but consented to learn it, and with a little assistance soon acquired a knowledge of its principles; and in another paroxysm in the afternoon of the same day in which she played at first, she won the sixth game of Dr. Butler, who is an experienced player; and all this was done when her eyes were closed and the bandage and velvet before them. The doctor says, "When she threw the dice, she called the numbers distinctly, and immediately made the moves without any hesitation. But most surprisingly curious! when she came out of the fit, and was asked to play backgammon, she replied that she never saw it played in her life, and was entirely ignorant of the game; and on trial, it was found that she could not even set the men.

After her extraordinary acuteness of vision ceased, which it did while she was in the hospital, she continued to rehearse passages of poetry and sing songs and hymns, all which she was unable to do in her lucid intervals.

An emetic, given while in the hospital, appears to have been the most beneficial of any medicine she took, and Dr. Woodward was inclined to refer the disorder considerably to the stomach, as improper food appeared to sometimes bring on, and at other times to aggravate, her paroxysms.

The brain was, however, seemingly implicated, as evinced by tenderness of the scalp, headache, and the amazing sensibility of her perceptions, and was considered the proximate seat of difficulty, which exciting causes were prone to develope.

These cases, with that of Rachel Baker, and one which I have since noticed from the pen of A. B. Shipman, of Syracuse, N. Y., seem to prove that all the laws of mentality have not as yet been grasped; that the mind, in fact, has a duality of powers independent of each other.

Since the finest injections could not be forced from the arteries into the veins, we must view anatomy and physiology as not fully developed by our great masters. The anatomical fact seems also to be in abeyance, why, in the dead subject, all the blood is found in the veins, and the arteries empty; which would seem to show that dying, in every form, is by bleeding to death—venous blood being as incapable of containing life in the veins, as if spilt on the ground. Thus the doors, both mental and anatomical, seem yet wide open to the physiologist.

I would in this place notice, relative to the strange-colored matter which was discharged from Nancy Hazard's hand, that a very respectable physician, resident in the same county in which she lived, informed me that he had a case of a man bitten in the heel by a spider, that an abscess formed in consequence, which he lanced, and that the matter discharged was green. A newspaper, if I mistake not, gave a similar account of a case which occurred in Georgia, some years past. And a case of death from the bite of a spider is found detailed in the Boston Medical and Surgical Journal of October 23d, 1844.

Somnambulism differs from sleep in the faculty of hearing, conversing, acting systematically, and traveling from place to place. Dreams in common sleep are remembered, but what happens in somnambulism is not.

The case of Rachel Baker occurred eleven years after the publication of Nancy Hazard's case. The late Samuel L. Mitchell, M. D., of New York, has given some interesting particulars respecting the preaching, exhorting and praying, in her fits of reverie or somnambulism, not a word of which she remembered when awake. It was remarked of Rachel, that she appeared to have two souls, her waking soul not remembering a single thing that her sleeping soul did or said, and *vice versa*.

In the case of Mrs. Cass, I omitted to say, that she at one time was entirely blind, which goes to prove that the visual rays which usually go from the brain to the eye had a transfer or metastasis to her other nerves; for when thus blind, and with her face turned away, she could still tell every person who came into her room, and any and every trivial thing that took place. She could also walk her room without coming in contact with the furniture or anything in her way. Her case is given at length by two respectable physicians, Drs. Bernard and Colby, the latter of whom mentions that this singular endowment, which I have called the

sixth sense, is mentioned by Dr. Good. One of her physicians also says, that, "guided by her internal sensation, she directed means for her recovery." These means were cupping four times on her stomach, and the use of the warm bath, by which she ultimately recovered. Her sufferings were great, and one feature of them is worthy of notice; viz., that when entirely blind with her eyes, she was still so distressed at the approach of light, that her attendants were obliged to keep her room in darkness. This is another proof of the metastasis of the eyesight to other sets of nerves.

I shall conclude cases of this kind by a reference to one which exceeds them all, and is related by a clergyman (the Rev. Mr. Glover, of Liverpool), from his own examination.

Miss M'Evoy, the patient, became blind in the month of June, 1816. The cause of her blindness is imputed to dropsy of the brain, of which she was relieved, we are told, by the discharge of water from the ears and nostrils, which did not, however, relieve her of blindness. The October following she accidentally discovered that she could read by touching the page of a book printed by unraised letters; and when the Rev. Mr. G. visited her, he found this to be the case, and she thus read fine print to him; her age was about 17.

But he did not fail of testing her surprising powers in several modes; and to prove that her eyes had nothing to do in the matter, he had her blindfolded, and now he put her *finger-sight* to several tests. He first enclosed six wafers between two plates of common window-glass, and he tells us that when thus blind and blindfolded, on touching the glass, "she accurately told the color of each." She told him the time of day by feeling the crystal of a watch, and would describe passengers and things in the street by touching the panes of the window.

I thought, as did every one who heard of it, that the accident in blasting rocks, by which a young man at Cavendish, Vermont, had an iron bolt, three feet long and nearly an inch in diameter, driven quite through his brain, and who lived, and afterward visited Boston, was, and would forever remain, quite unparalleled. But I have since seen one given by Dr. Macartney, quite its equal, which I shall give in his own words:—

"He had known," he said, "an instance where a pitchfork had been driven into the eye of a man, had pierced the brain, and fixed itself so firm at the top of his head, that it was obliged to be hammered out from the opposite bone; and the man's mental functions never were disturbed by it, and he recovered and lived for some time."—*Boston Medical and Surgical Journal*.

Lebanon, Conn., April, 1857.

## EDITORIAL AND MISCELLANEOUS.

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### TO OUR FRIENDS.

We are earnestly laboring to build up a journal, that will not only be creditable to those connected with its management, and responsible for its publication, but one that will in some degree aid in elevating the character and position of the medical profession of our own State and of the whole southern country ; to this end we would again urge our friends to a more diligent and regular contribution to our Journal.

We have many friends who are fully competent to keep our pages filled with matter that would greatly advance our profession, as well as themselves, who are doing nothing in this way—this should not be—we cannot write to them individually, but would say, through this medium, let us hear from you more frequently.

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### BIBLIOGRAPHICAL.

We have received from the publishers Messrs. Blanchard & Lea, "The Physiological Anatomy and Physiology of Man." By Robert Bentley Todd, M. D., F. R. S., &c., and William Bowman F. R. S., &c., &c., Late Professors of Physiology and General Morbid Anatomy, in Kings College, London. Complete in one volume, with two hundred and ninety-eight illustrations. This is the conclusion of a work commenced in the year 1843, and intended as a text book for the Lectures on General Anatomy and Physiology, given in Kings College, London. The term Physiological Anatomy, has been adopted in preference to the older one of General, or the later one of Histological, as more comprehensive, and as intended to designate that kind of Anatomy, a knowledge of which, is especially required for practical investigations connected with physiological science.



In this work the Authors propose to give such a view of the main facts and doctrines of Anatomy and Physiology, particularly of those bearing on Practical Medicine and Surgery, as might suffice for the wants of the Student and Practitioner. They remark that, "Following that great master Haller, we were desirous of giving to Anatomy a greater degree of prominence, than had been usual in Physiological works, under the conviction that a thorough training in its several branches, descriptive, physiological, and comparative, is necessary to the formation of those habits of mind, which best fit the possessor for the successful investigation and the correct appreciation of physiological science."

We can, with the most entire confidence, recommend the work as having come up fully to the design of the Authors, and desire to express our pleasure in the fact, that so valuable a contribution to that department of Medical Science, (to the study of which our particular attention has for some time been directed) has been finally completed.

We next find upon our table A New American Edition (revised by the Author) of the Diseases of Women, including those of Pregnancy and Children. By Fleetwood Churchill, M. D., &c., &c., with notes and additions, by D. Francis Condie, M. D., &c.

It would seem almost useless for us to say anything in commendation of a work which has already established so enviable a reputation. Several new chapters have been added, and also a number of wood-cuts, and we have no hesitation in endorsing the statement, "that it is altogether a complete and faithful exponent of the present state of medical opinions and experience, in reference to the Pathology and Therapeutics of the entire range of diseases, to which the female sex is liable, including those of pregnancy and children."

We have also received a Manual of Examinations upon Anatomy, Physiology, Surgery, Practice of Medicine, Chemistry, Obstetrics, Materia Medica, Pharmacy and Therapeutics, especially designed for Students of Medicine, to which is added a Medical Formulary, by J. I. Ludlow, A. M., M. D. This is a new edition, thoroughly revised and much enlarged, with three hundred and seventy illustrations.

Since we must have works of this description, without giving any opinion as to the *real value* of such publications, our opinion is, that it is one of the best of its class, and to those for whom it was especially prepared, we recommend it as well adapted to the purpose for which it was designed.

Besides the books, we have received a number of pamphlets, which will be noticed upon some future occasion.

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*Case of Colico Pictonum produced by the White Lead Treatment of a severe Scald.* By G. A. KUNKLER, M. D., of Madison, Ia.

The following case may not prove without interest, in showing how readily the toxic effects of lead may manifest themselves in certain persons, after its external application to a deluded surface.

Kate B., an Irish servant girl, scalded her arm by a kettle of boiling water falling upon it during the latter part of last December. The injury extended from the elbow over the whole forearm and hand, and was followed by extensive vesication. After the contents of the vesicles were evacuated, by puncturing them with a needle, the common white paint, of the consistency of cream, was applied freely with a camel's hair brush, the parts covered with cotton, and a roller lightly applied over the whole. The accident occurred early in the morning; and on the following day, the dressings having become dry, were renewed. On the evening of the third day, I saw the patient again, and then found her laboring under unmistakable symptoms of *colica saturnina*, such as acute abdominal pain, retraction of the umbilicus, constipation, and *slight discoloration of the gums*. The burn was doing well; under the use of opium, purgatives, &c, she was rapidly relieved. The use of the paint was discontinued, and the linseed oil and lime water mixture substituted, from the use of which the burn got well. During the past five years, I have used the white paint in a number of cases of burns and scalds of every imaginable description, without ever noticing any injurious result; my attention having first been called to it by a paper of Professor Gross, in volume iii of the Transactions of the American Medical Association. In one case, in particular, where both the lower extremities of a child, five years of age, were badly scalded from the hips down to the feet, the white paint was applied several times over the whole surface, without any injurious result whatever; the convalescence being extraordinarily rapid.

In the first-mentioned case, I was particular to investigate whether lead in any shape could have entered the system through any other channel; but was soon satisfied that this was altogether improbable, and I am, therefore, firmly convinced that the colic was due entirely to the absorption of the lead from the burnt surface. [This is the only well-authenticated case of colicky symptoms resulting from the local use of white lead in burns and scalds that we remember to have ever heard of, not

withstanding its very general employment. The occurrence of such a case is therefore to be regarded only as a great rarity, and should not be urged as an objection to the remedy. When effects of this sort occur, they may be promptly relieved by the internal administration of aromatic sulphuric acid in repeated doses.]—*North American Medico-Chirurgical Review*.

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*Cure of Vesico-Vaginal Fistula in a Novel Way.* By Dr. BERTEL. (L'Union Médicale.) Dr. Bertel records a case of cure of vesico-vaginal fistula by a method which consists in pinching and crushing the vaginal mucous membrane. A woman, aged fifty, had suffered from a fistula for fourteen years. It was deeply seated, and engaged the body of the bladder on a level with the os tincæ. It was capable of admitting the tip of the finger through the vagina into the bladder. It was slightly oval; its larger extremity was directed towards the fundus of the bladder; its edges were somewhat thickened and hard; it was not funnel-shaped. The lesion followed a laborious delivery. M. Bertel applied a pinching instrument to nip the edges of the fistula together, which he promises to describe hereafter when made more presentable and scientific. On the third day it was found that no urine escaped into the vagina. On removing the instrument, the opening was found closed. In its place was a ridge of a reddish brown color, easily bleeding, half the size of a cherry. Henceforth all urine passed by the urethra—no opening could be detected. The cure Dr. Bertel describes as perfect.—*Virginia Medical Jour.*

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*Alum as a Remedy in Croup.*—A correspondent of the New Hampshire Journal of Medicine states that for three years he has used alum in croup, and in all that time has not seen a fatal case which was treated with it from the beginning. He usually gives about ten grains, once in ten minutes, until vomiting is induced, using at the same time tartar emetic or the hive syrup freely—the latter subduing the inflammation, while alum has more of a repulsive action.—*St. Med. and Sur. Journal*

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*Kentucky Giantess.*—There is now on exhibition in the Museum in N. Orleans, a Kentucky female, weighing 515 pounds, is nine feet two inches in circumference, and measures twenty-nine inches around the arm, and thirty-eight inches around the calf of the leg. Kentucky is rather remarkable for monsters in the human form.

*Death from the Inhalation of Amylene.*—We have noticed in previous numbers of the Journal, the new anæsthetic lately introduced by Dr. Snow, of London. This agent has been highly extolled by many experimenters for its innoxiousness. MM. Debout and Thourdes have declared that it was even safer than sulphuric ether, whilst Mr. Clarke, of Bristol, believes "that it would be impossible to get too much into the system." The unfortunate result of the case recently occurring under the hands of Dr. Snow himself, will be calculated to moderate the sanguine expectations of the advocates of amylene.—*Charleston Medical Journal.*

### METEOROLOGICAL OBSERVATIONS FOR JUNE, 1857, AT ATLANTA, GA.

| JUNE. | THERMOMETER. |         |         | BAROMETER. |         |         | WIND. | REMARKS.                    |
|-------|--------------|---------|---------|------------|---------|---------|-------|-----------------------------|
|       | 7 A. M.      | 2 P. M. | 7 P. M. | 7 A. M.    | 2 P. M. | 7 P. M. |       |                             |
| 1     | 64           | 60      | 62      | 29.90      | 29.85   | 29.85   |       | Cloudy $\frac{1}{2}$ .      |
| 2     | 62           | 68      | 68      | 29.85      | 29.95   | 29.95   | N. W. | Fair.                       |
| 3     | 58           | 78      | 60      | 29.92      | 30.05   | 30.     | W.    | Fair.                       |
| 4     | 58           | 86      | 74      | 30.05      | 30.07   | 30.     | N. E. | Fair.                       |
| 5     | 64           | 84      | 68      | 29.95      | 30.     | 29.95   | W.    | Cloudy—Rain $\frac{3}{4}$ . |
| 6     | 60           | 70      | 60      | 29.95      | 30.     | 30.     | N. E. | Cloudy.                     |
| 7     | 60           | 84      | 82      | 29.95      | 30.05   | 30.     | E.    | Hazy.                       |
| 8     | 74           | 90      | 84      | 30.10      | 30.12   | 30.12   | S. E. | Fair.                       |
| 9     | 78           | 96      | 68      | 30.20      | 30.20   | 30.10   | S. W. | Fair.                       |
| 10    | 70           | 90      | 74      | 30.05      | 30.05   | 29.92   | S. W. | Cloudy.                     |
| 11    | 68           | 86      | 76      | 29.80      | 29.80   | 29.83   | N. W. | Fair.                       |
| 12    | 62           | 88      | 80      | 29.95      | 30.     | 30.     | W.    | Fair.                       |
| 13    | 68           | 94      | 82      | 30.        | 30.15   | 30.10   | W.    | Fair.                       |
| 14    | 74           | 88      | 88      | 30.12      | 30.20   | 30.18   | S. W. | Fair.                       |
| 15    | 80           | 72      | 64      | 30.20      | 30.15   | 30.10   | N. W. | Cloudy—Rain 1-16.           |
| 16    | 68           | 88      | 76      | 30.08      | 30.12   | 30.05   | N. W. | Cloudy.                     |
| 17    | 68           | 74      | 68      | 30.        | 29.95   | 29.95   | W.    | Cloudy—Rain $\frac{1}{2}$ . |
| 18    | 80           | 80      | 74      | 29.90      | 29.95   | 29.90   | W.    | Hazy—Drizzly.               |
| 19    | 56           | 75      | 66      | 29.85      | 29.95   | 29.95   | N. W. | Fair.                       |
| 20    | 64           | 82      | 78      | 29.95      | 30.     | 30.05   | W.    | Fair.                       |
| 21    | 76           | 88      | 78      | 30.10      | 30.10   | 30.05   | S. E. | Fair.                       |
| 22    | 68           | 78      | 64      | 30.05      | 30.10   | 30.02   | N. W. | Fair.                       |
| 23    | 58           | 80      | 70      | 30.        | 30.12   | 30.05   | N. W. | Fair.                       |
| 24    | 64           | 78      | 70      | 30.10      | 30.12   | 30.10   | E.    | Hazy.                       |
| 25    | 72           | 82      | 77      | 30.12      | 30.12   | 30.10   | S. E. | Hazy.                       |
| 26    | 70           | 88      | 75      | 30.10      | 30.15   | 30.10   | S.    | Cloudy—Rain $\frac{1}{2}$ . |
| 27    | 70           | 86      | 72      | 30.10      | 30.15   | 30.05   | S. W. | Cloudy—Rain $\frac{1}{2}$ . |
| 28    | 70           | 80      | 76      | 30.05      | 30.05   | 30.     | W.    | Hazy.                       |
| 29    | 76           | 84      | 76      | 30.        | 30.     | 29.95   | N. W. | Fair.                       |
| 30    | 76           | 80      | 72      | 30.        | 29.95   | 29.90   | N. W. | Fair.                       |

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# A T L A N T A

## Medical and Surgical Journal.

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AUGUST, 1857.

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### ORIGINAL COMMUNICATIONS.

#### ARTICLE I.

*A Case of Hypertrophy of the Spleen and Post Mortem examination.* By WILLIAM H. PHILPOT, M. D., of Redbone, Ga.

I WAS called the 20th June last, about 11 o'clock, at night, to the plantation of Cyrus Robinson, of this county, to see Salina, a bright mulatto woman some 30 or 35 years of age, who the messenger informed me was supposed to be dying. I found her suffering severe pains in the Epigastric, right and left Hypochondriac regions, and very severe, cephalalgia, and great dyspnea,—pulse feeble and some 80 beats. The patient was rational, but suffering so much pain I could ascertain but little as regards her condition. She would point me to her head as the most painful. I gave her a mixture of Tincture Valerian and Sulp. Ether—blistered a small spot back of each ear with strong Aqua Ammonia, and applied some morphia, to the denuded surface, and after abstracting some 8 or 10  $\frac{3}{4}$  of blood from the arm, she was soon asleep.

The lady, the wife of the overseer, then informed me that "Salina was taken sick nearly two years ago with chills and fever, and in a few days a swelling commenced in her left side. She has been under the treatment of several respectable physicians for Enlargement of the Spleen; that after taking physic the most of the time, up to a month or so back, it was decided nothing more could be done, and she had suffered at times as

I then saw her. She was daily expected to die for the last month or two."

I saw Salina early next morning, she was easy the remainder of last night, and slept some little—was suffering a great deal with her head—great dyspnea and severe pains in the right and left Hypochondriac, and the Epigastric region—and is unable to move without assistance. I found, on examination, the left side of abdomen greatly tumified, as was found to be the Epigastric and right Hypochondriac region. Dullness was found to exist on percussion, over both, and the respiratory murmur absent in the left lung. She had frequent cough attended with a thin frothy expectoration mixed with mucus. Her Stomach was very irritable, and she had vomited up several clots of blood as large as my thumb. She seemed *In Articulo Mortis* from the great dyspnea.

Nothing I could administer internally seemed to do so well, or relieve the pain and dyspnea so quick as blood letting. Salina suffered until the morning of the 26th, about 4 o'clock, when she died.

Having to send some six or seven miles to procure professional assistance in performing the *Post Mortem*, and it then being very uncertain if the physician would be found at home, I commenced the examination alone, some six or eight hours after death. Owing to my being without assistance, and the fatigue and hurry, I did not extend the examination as far and as closely as I would have done or wished.

Upon making an incision, so as to expose the whole contents of the abdomen, the spleen was found occupying a position, extending from the diaphragm to the iliac region; its vessels very much enlarged and filled with blood, the upper portion or margin was found lying against the Cardiac extremity of the Stomach, while its concave surface was firmly pressed against it by the left lobe of the Liver. I removed the Spleen—it weighed 5 lbs. 4 or 5  $\frac{3}{4}$ . I send it on for your College Museum.

The Liver was found of an enormous size, occupying the whole lumbar and Epigastric region, and with the spleen seeming nearly to fill the whole of the abdominal cavity, compressing the stomach and intestines against the spinal column. Firm adhesions had taken place between its peritoneal cover-

ing and the abdominal parietes and diaphragm, requiring some force to separate, and rupturing the membrane in its separation. The surface was rough and uneven, made so by lumps of various sizes, which I supposed to be Tubercles. Upon making an incision into the substance of this organ, some dark looking fluid was seen to flow out. The gall cyst was distended to some extent, and filled with dark colored bile. Adhesions were also found to exist between it and some portions of the stomach. This organ being very small and its coats thin and transparent—it was empty save some little dark brown fluid. The liver and spleen forced up the diaphragm into the thoracic cavity, enlarging the cavity of the abdomen, and of course reducing that of the thorax. I did not remove the liver from its connections, but from the enormous size, am satisfied it would have weighed some 12 or 15 lbs. The kidneys were somewhat enlarged and congested, but looked natural and healthy otherwise.

On cutting into and exposing the contents of the thorax, the Pericardium was found to contain some half pint or more of fluid. The lungs atrophied and covered with melanic deposits; the left one not a great deal larger than my hand, and extensive and firm adhesions, between it and the Pleura Costalis; the right lung was larger—was melanotic and but little if any adhesions. I did not, owing to time and circumstances, examine the brain.

Thus I have endeavored to give you as correct an account as possible of my hasty and hurried examination.

While I am writing, let me give you a rare case of Midwifery that occurred in my neighborhood a few weeks ago.

Nancy, a negro woman, pregnant, belonging to Mr. J. P. Lenard, started off on a tramp on Sunday to see some of her dark friends on a neighboring plantation. When some four miles from home, labor commenced, and the pains increasing so fast and strong, she could not proceed any farther, and in a fence corner, some four miles from home, without any assistance, she gave birth to a large fine child, and *after a little* she “*broke*” the cord, and, with it in her fingers, wrapped the little fellow up in some of her own clothing and started home, was overtaken by a heavy rain and walked in it nearly all the way.

An old negro mid-wife on the plantation made an examination, and not finding the placenta, informed the husband of the girl, that if the after-birth was left on the ground and rotted, that his wife would gradually sink away and die. Off he starts on a hunting expedition, taking his wife's track back; but could find nothing of the object looked for, and returned home with a sad and disconsolate heart, but soon was comforted by the old granny who told him, the after-birth was eaten by bugs which would save the life of his wife.

Nancy and the baby did well; she being up and about in a few days without any unpleasant symptoms.

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## ARTICLE II.

*Asthma—its Pathology, Treatment, &c.* By N. F. POWERS, M. D., Thompson, Georgia.

To well understand this disease, a minute knowledge of the structures of the organs of respiration—a knowledge of their functions, of their muscles, nerves and connections, is indispensably necessary. Without such knowledge, a vague notion only can be had of the Pathology of Asthma.

The lungs perform a very important part in vitalizing and sustaining the system. See their structural arrangements—their adaptation to the offices they have to perform, as in excretion, in aerating the blood, and in causing it to flow in the minutest capillaries. All this, when viewed as a whole, must excite, in the mind of the philosopher, wonder and admiration. The lungs, with their appendages, form a beautiful and complicated mechanism. They never cease their movements after the first gush of air has filled them; they are never fatigued; they move day and night without our consciousness; continued are their movements until death whispers be still. Their respirations in health are as one to five pulsations of the heart, in Pneumonia as one to two, in typhoid disease one to eight. The time for a complete respiration is three and a half



seconds. Dr. J. C. Draper states that by experiments he has ascertained the following interesting results :

1st. "On making sixteen respirations in a minute, and continuing the experiment for twenty minutes, the average of five different series of experiments gives 622 cubic inches of air expired each minute.

"2nd. On making six respirations in a minute, and continuing the trial for twenty minutes, the average of three series of experiments gives 511 cubic inches of air expired each minute.

"3rd. On making three respirations in a minute, and continuing the experiment for twenty minutes, the average amount of air is 1,079 cubic inches for the air expired in each minute." So that, if one respiration be made to five, the quantity of air consumed will be nearly doubled. The lungs then, in hurried respiration, do not consume as many inches of air, as when inspiration is deep and protracted.

The vesicles which are found in the parenchymatous structure, if spread out, would have a surface thirty-five times greater than the superficies of the whole body. Some eighteen thousand of these vesicles are clustered around each bronchi, so that there are in the lungs some six hundred millions.

Then what a great inlet are the lungs for the admission into the system of metaphitic exhalations, poisonous gasses, and all such agents as contaminate the blood, and produce a host of morbid influences, through the ganglionic system of nerves. Not only are the lungs the inlet—the point for the introduction of such agents as beget what is denominated the Asthma, but it is highly probable that the "*Materies Morbi*" of the greater number of the maladies of the human family find entrance here; even the ova of the parasites. It has been truly said, "Man's body is unquestionably a little world to many animals." Those found in the liver, in the bronchial glands, in the muscles, in the brain, and in the eye, and dermoid tissue, enter the system while floating in the atmosphere, and thus gather into the blood, while circulating, and become inhabitants of the body. Hence, causes may be compounded by being introduced simultaneously into the lungs, thus generating disease of a mixed character.

The term *Asthma*, as used by many, is indefinite. The word classically signifies difficult breathing. But *Dyspnæa* is a constant symptom of various diseases, such as *Hydrothorax*, *Pleurisy*, *stertor* in *Apoplexy*, *Croup*, and *Emphysema*. In all these, the harmony of the organic and functional activity of the respiratory apparatus is disturbed—the breathing is difficult; but nevertheless these diseases are not *Asthma*.

*Asthma*, in Dr. Cullen's system of nosology, is a genus of disease in class *neurosis*, and order *spasmi*. He points out three species, the spontaneous, the plethoric, and *exanthematic*. While others speak of the spasmodic, the pure nervous, the thymic, the humeral, the dry, the mucous catarrhal, latent catarrhal, acute, chronic, and congestive. Nearly every writer seems to have sought out some new name, and thus making confusion more confounded.

Many affections which have been denominated *Asthma* are only symptoms of disease, and should be regarded and treated as such by the practitioner. *Dyspnæa* may be a symptom of cardiac, gastric, cutaneous, intestinal and renal diseases. Nor is this surprising, when it is remembered that all the organs which are the seat of these diseases are so intimately connected with the lungs through the ganglionic system of nerves. From these causes, we find those persons who are predisposed to *Asthma*, often labor under dyspepsia, diarrhœa, cardiac affections, gastric, intestinal, renal and cerebro-spinal, hepatic and cutaneous diseases. This is a consequence of the hypersensitiveness of the eighth pair or par vagum nerve.

Under the influence of opium, a mere touch upon the skin will often produce spasm, and again, cold water thrown on the face will relieve syncope. These results take place from the impressions transmitted through the skin nerves to the nerve centres.

*Idiopathic Asthma* is used here to signify a difficulty of breathing, originating in some of the tissues of the organ itself, or in the non-fulfilment of some of the respiratory functions. It is not dependent on some other organic disease; or in other words it is not symptomatic. This is the variety of *Asthma* now under consideration. It may be paroxysmal, intermitting and periodic. An attack predisposes to its recurrence under similar circumstances or exciting influences.

Asthma is essentially a disease of the bronchial tubelets and vesicles affecting various other organs in their functional performances. This is a natural sequence, as healthy respiration is so necessary to the support and continuance of the vital phenomena; such as the circulation of the blood, the assimilation of the Chyle, to the calorification of the whole system, and the renewal of the tissues. For this purpose, atmosphere must be admitted into the lungs, through the bronchi, else the blood cannot be aerated. The atmosphere is caused to pass into the lungs by the action of the thorax and diaphragm, through the bronchial tubelets, into the pulmonary vesicles. As has already been stated, these vesicles are very numerous, and are divided into groups denominated lobules, which are independent of each other. The air cells or pulmonary vesicles are also independent of each other, being connected only by their pedicles. The bronchial tubelets, which admit the atmosphere, as has been clearly demonstrated, are made up of mucous-membrane, cellular tissue, longitudinal and circular fibres. These fibres are contractile, or in other words they are muscular and may be spasmodically affected.

Now, *Asthma originates primarily in the mucous membrane of the air breathing passages, generating an impression, which through the nerves is reflected on the muscular fibres, causing their contraction or spasmodic action.* The spasm of the longitudinal muscular fibres of the bronchial tubelets, lessens their caliber, diminishes the quantity of supplied atmosphere, thus congests the venous capillaries of the pulmonary tissue, lessening their capacity, so that the blood is not normally aerated. These effects and sequences, when taken together, is Asthma, which takes place through the agency of the nerves of respiration. These are derived principally from the Pneumogastric and sympathetic nerves. None of the fibres of the latter are per se motor or sensory, or do its ganglia produce reflex action. The agency which it exerts is due to its association with the cerebro-spinal nerve fibres. It lessens or increases by the influence it exerts over the contractility of the heart, arteries, and capillary nutrition and secretion. And in this way may, through sympathy, generate pulmonary diseases. The pneumogastric is the principal nerve of respiration, though the sen-

sory nerve of the face is derived from the 5th pair, which is made manifest by the action of cold air or water. Nor is it restricted to cold air or water, as is proven from the beneficial effects of titillation and other kinds of irritation of the skin, in keeping up the respiratory movement in Narcotism. The Pneumogastric, in fulfilling the respiratory functions, associates with the sympathetic and spinal accessory, and thus becomes bi-functional, and through it the want of air is felt in Asthma.

Even when the air is admitted into the lungs, if its oxygen is not taken up by capillaries, the supply of oxygenated blood must be deficient in carrying on the various processes of vitality. The pulmonary capillaries spread out their fimbriated extremities into an expanded net work, which surrounds each air cell, and ramifies into the parenchymatous structure of the lungs. Some think that in this structure carbonic acid gas is formed, others that it is a secretion of the mucous membrane. But neither of their positions are true, as it is generated in the blood itself, at least in all vertebrated animals. The capillaries are separated from the air cells by a thin film or membrane of great tenuity, so that the exchange of the different gases takes place rapidly through it. This exchange is entirely of a physical character, in which the nervous systems are not engaged. In Asthma, the exchange of gases is deficient, in consequence of the want of a normal supply of atmosphere; the contraction of the air tubes preventing its admission. Consequently, there must be a partial stagnation of blood in the pulmonary capillaries—a lessening of the propelling power of the heart; hence it flutters, throbs and palpitates—a diminishing of the primary cause of the circulation and the vital stimuli, and an arresting partially of the excretory action of the lungs, which has a morbid influence on the liver and kidneys. As the lungs and liver are developed in an inverse proportion, the inference is, that when respiration is interrupted for a length of time, the liver must be affected to a greater or less degree. If respiration is lessened, the functional activity of the liver must be increased, as well as that of the kidneys and skin. Consequently, diseased livers and kidneys are often found in the Asthmatic, and as an effect of these disorders may follow a host of other diseases. To comprehend these various results, the sympathies, both con-

tiguous and continuous which may be aroused by impaired respiration is highly interesting and important to the physician. It seems that without it he must be a mere groping in the dark—an empiric. “To be a good doctor, one must be a great physiologist.”

When spasms or contractions take place in the bronchial tubelets, as in Spasmodic Asthma, they are not, in consequence of disease of the excito-motor or excito-secretory system of nerves, for then the disease would be more permanent and only a symptom. According to Sir Marshall Hall's theory, spasms as well as convulsions are not local, but originate in the diseased state of the spinal or excito-motory system. But with due reference to the high authority, perhaps it may be asserted that in the majority of the instances in which spasms take place, there is previously no diseased action existing in the spinal system of nerves. If spasms supervene in dentition—in the bronchial muscular fibres, as in Asthma—in spasms of the stomach or intestines, the *prima causa* acts directly on the fimbriated extremities of the nerves involved. The cause in dentition is the teeth acting on or irritating the branch of the fifth pair of nerves, while that of the stomach, intestines and lungs is the pneumogastric and spinal nerves. Hence the *prima causa*, an irritant—an excitor of the motory system,—begets spasms through the reflex functions of the nerves, so that in Asthma the sensitive branches of the fifth pair, become first exciters of the spinal nerves, which are involved in sneezing, producing action in the muscles of respiration, and a flow of mucus, from the anterior and posterior nares. The same principles are involved in reference to the cause and reflex action throughout the list of diseases, which are denominated spasmodic. The motor-excitor and motor-secretory generate influences in accordance with their functions, not that they are the primary seat of disease, but because they are excited into action from the diseased condition of the tissues to which they are distributed. This tissue in Asthma, and intestinal diseases, is the mucous membrane. Dr. Campbell of Augusta, says: “Local irritations can, through this system, (excitor-motor) produce convulsions by the reflex functions of the nerves, the sensitive branch of the fifth pair becoming excitor to the motory spinal nerves, and so we may justly infer

do these same branches of the fifth pair, under certain circumstances, become excitor to the secretory filaments of the sympathetic." In the same manner may the secretory filaments be affected in Asthma. Consequently all the muscles of respiration as well as those organs of secretion and excretion are involved in Asthma.

There is but one variety of Asthma, which is not a symptom of any other disease. What is called Asthma by many is only a Dyspnœa. Asthma, it is true, may occur simultaneously with other ailments, but these diseases do not bear the relations of cause and effect to each other.

The symptoms of Asthma are so characteristic, that it may be readily distinguished from other diseases. The premonitory, when superinduced by the inhalation, through the nostrils of irritants, are ticklings of the anterior nares, an irresistible desire to sneeze, attended with a rapid secretion of mucus, from the pituitary membrane—hypersensitiveness of this membrane, gradually extending through the posterior nares over the fauces and larynx—profluvia of mucus not very tenacious, resembling that in common catarrh—irritation of the bronchus—labored and distressing cough—eyes red and suffused; the mucous, especially that from the bronchial tubes becomes more and more tenacious, producing a titillating sensation in the throat so as often to superinduce emesis. It is transparent when held on the tip of the finger, tremulous, looking like a gelatinous mass. It is expectorated with difficulty, and is forced up from the bronchial tubes, which always gives partial relief. All the above named symptoms may be brought on by the mere inhalation of a small particle (so minute that it cannot be seen) of "Ipecac." After the vesicles themselves become involved, then symptoms become prominent. The patient complains of stricture across the chest, extending around the entire thorax, or he feels as if he is tightly bound with strong cords, so that he feels that he only has the power of elevating the shoulders and throwing back the elbows, without the ability of extending the ribs, so essential to a complete inspiration.

This spasm of inter-costal muscles extends even to those of the floating ribs. The spasm of the muscles supervening, the sibilent rale is heard in the bronchial tubelets. From physical

signs it is now presumable that the longitudinal fibres of each bronchi and vesicle are spasmodically affected, so that the escape of air at each expiration produces a wheezing rattling sound, resembling the air passing through tubes whose ends are partly covered by a tenacious mucous; which rises and falls corresponding to the inspirations and expirations. When the muscular fibres of the bronchi and the respiratory muscles of the chest becomes affected, then comes the horror of the disease; only air sufficient, though barely, for life is admitted—none to spare—none to waste, but still a constant and invincible desire to gasp it, cool and fresh, to take deep and long inspirations, but then the disease, like the close hug of death holds—binds in cords too strong to be broken. The eyes are now red, suffused, and protruded, as one about to die from asphyxia, the blood vessels on the forehead and face are turgid, looking full and prominent. The complexion is often dark, the lips swollen and purple. The whole face sometimes in color, looks like one suffering from urticaria, the feet and hands are colder than natural. The pulse in the robust is frequent and full—in the old small and compressible—blood when extracted is darker than in health. The temperature is lowered from  $18^{\circ}$  to  $20^{\circ}$ ; the kidneys secrete rapidly a limpid urine, begetting an urgent desire to micturate, when cystic contractions are rather spasmodic. This is even felt in the larger intestines, so that the desire to visit the temple of cloecina often comes on unexpectedly, and is unusually hasty in its demands. Speech is difficult, not from a loss of power to articulate, but from the want of time. The easiest, if there can be any, is the semi recumbent position, with the head and shoulders supported by pillows—the former reclining so as to elevate the chin, the elbow thrown back and the sternum raised, so as to give, by position, as much freedom as possible to the organs of respiration. The duration of the paroxysm is uncertain.

The time of attack is variable according to the causes, peculiarities of patient, &c. In the majority of instances, it comes on about 2 o'clock at night. If produced by the inhalation of Ipecac, the fumes of a sulphur match, the "hay odor," or the passing of a cloud surcharged with electricity, then the attack follows immediately after the action of the exciting cause. But even when this is the case, if the

disease after the first paroxysm returns, it will come in the night, the patient suffering all the distress of Asthma, when waking from his first sleep. Even such attacks as the above, although produced by odors, &c., and periodical, continuing as a quotidian for four or five days, and in some rare cases even for ten weeks. Though in the protracted cases, the patient is never entirely free from uneasy sensations and whizzing sounds in the lungs.

Some writers have asserted that Asthma is a disease of adult age, but this is not the experience of all. It may occur in infancy. One patient seven years old, who came under the observation of the writer, suffered from a severe attack. Not only did she have Asthma, the respiratory functions being primarily affected, but there was also spasms in the muscles of the face and eyes, so much so that permanent strabismus was superinduced, and strange to say hemiopia is now one of its sequences.

When Asthma has been severe and of long standing, the patient is much emaciated, indicating a deficiency in the nutritive process, the shoulders are elevated and fall too far forwards, the countenance has a peculiar expression, marked by the lines of anxiety, of restlessness. If the disease is of "long standing," the heart, the liver, the kidneys and skin become morbidly affected.

The diagnosis in this disease is not difficult. There are many diseases which have dyspnea as a symptom, but one who has ever seen or studied the pathology of Asthma, cannot make such a blunder as to confound the symptoms of other diseases with those of Asthma.

To diagnose properly is a matter of the highest importance, but especially in Asthma. .

The wise physician makes out his diagnosis from signs exhibited by the countenance; in the peculiarities of attitude; from the condition of the digestive organs; from the various attitudes of the body; from the manifestations of the nervous system; from the normal and abnormal condition of the circulatory apparatus; the respiratory apparatus; the emunctories of the body; from the lymphatic system, and from the organs of secretion: as for instance, if there is an affection of the respiratory apparatus, manifested by panting—short, la-



bored and anxious respiration. If there is wheezing, if there are physical signs indicating contraction of the bronchial tubes, why the diagnosis must be pronounced Asthma.

A few of the diseases, which in their development resemble some of the features of Asthma will now be pointed out.

In hysteria, the glottis is often spasmodically affected, resulting in dyspnæa, which to a careless observer might be diagnosed asthma, but then the lazy movements of the hysteric, the horizontal posture of the patient, when compared with the hasty movements, and semi recumbent posture of the Asthmatic, as well as the hasty efforts after air—the almost grasping with the hands for it, or the leaning forward with elbows on the knees, the extreme distress, the urine clear, abundant, especially after retiring to bed, limpid, the sputa clear, tenacious, but few air vesicles to be seen in it all give characteristic features, well known to old acquaintances.

Besides in all laryngeal affections, the patient points out the throat as the seat of the disease, by handling it, as if to relieve or enlarge the respiratory inlets. In such affections even the child will grasp its throat with its little hands. Besides these, there is another diagnostic sign, not common in laryngeal affections, but peculiar to Asthma, a wheezing purring sound can be heard by auscultation.

The sounds in Bronchitis are somewhat after the same note, but they can by an erudite ear, be readily distinguished, although to the novitiate, they may be considered identical. Indeed one may be attacked by Asthma while suffering from Bronchitis, which will render the signs similar and difficult to be diagnosed. In bronchitis there is fever; the attack takes place gradually, while in asthma it comes on suddenly and there is no fever. The chest in bronchitis does not feel as if bound by chords—the chest can be expanded to the utmost. Dyspnea is a common attendant on many other diseases of the thoracic and abdominal viscera, which, when the lungs become involved, and then are taken, in an isolated form may resemble Asthma, but all these diseases can *now be readily* diagnosed, and their etiology well understood by the assistance of auscultation and percussion. Besides the above mentioned signs, there are many others, such as those of the countenance and of the thorax. This can be seen in the contracted chest and

the elevated shoulders. Besides it is surprising that Asthma is not more common, when the mal-formed chest of mothers of the present day is scanned. Perhaps this is the *prima causa* of Asthma being so common in the present day. It might be called the mother's folly, resting as a curse upon the child. The females of the past age thought they would improve the figure the wise God gave them. They preferred the wasp or hour glass shape, to those models of perfection, the *venus of milo* and *venus de medici*. Powers, our illustrious countryman, says: "Eve is an old-fashioned lady, and not so well formed or attractive as her grand-daughters, at least so think some of them. She wears her hair in a natural and most primitive manner. \* \* \* \* Her *waist is quite too large for our modern notions of beauty*. But Eve is very stiff and unyielding in her disposition. She *will not allow her waist to be reduced by bandaging, because she is far more comfortable as she is*, and besides, *she has some regard for her health, which might suffer from such restraints on her lungs*," &c.

*Causes of Asthma.*—These are varied and numerous, and act on mucous membranes, on the skin, and through the nerve centres. Without a knowledge of the causes of Asthma, its treatment must be mere empiricism. For classification, these may be divided into the predisposing or remote, the proximate or pathological. The latter have been already pointed out. The former give origin to those changes so essential to the action of the proximate causes of Asthma.

The exciting causes of Asthma are such as develop the disease after the remote has established a basis for action. Although the predisposing cause of Asthma may exist, nevertheless an attack may never supervene, if the pathological do or has not existed. The exciting cause without the predisposing may be simple and harmless: as for instance the sudden vicissitudes of temperature—a current of cold air coming in contact with the neck and chest, the inhalation of offensive substances, deprivation of sleep, anxiety of mind, the excitement of the moral feelings, the indulgence in wine drinking, and darkness. All these may be exciting causes, provided the predisposing have prepared the system for their reception.

The remote causes of Asthma may be divided into the internal and external. The internal are such as have been al-

ready mentioned and also include malformations of the chest, and of inlets of the thorax, hereditary transmissions, hypersensitiveness of the pulmonary mucus membrane, which renders it very susceptible to morbid influences. The external consist of such as odors, gasses, cold air, a warm damp atmosphere. Nor is it singular that the latter should produce asthma, when it is remembered that the skin is one of the greatest emunctories of the system, and eliminates eleven while the lungs eliminate only seven grains, or in other words according to Sequin's experiments, the loss through the skin is, during the day, two pounds and three quarters. Now a moist warm atmosphere must check the exhalation of the skin, the elimination of effete matter, which may cause Asthma in the susceptible or predisposed. Hence the majority of Asthmatics often complain of oppression when such is the state of the atmosphere.

Another external cause is Ozone. Which is a peculiar modification of oxygen, through the action of electricity. Perhaps it may be called the oxide of electricity. This change in oxygen, or the existence of ozone is quickly perceived by the Asthmatic. He is so sensitive that its presence awakens him from deep sleep when an electric cloud passes—he feels restless when the thunder sounds and the lightning flashes—not from fear or dread, for often when he has not seen, being asleep, he finds himself, on waking, setting up in bed, wheezing and gasping after air. He becomes a sort of living barometer. Consequently when influenzas prevail, Asthmas are common. Besides, Asthmas, perhaps from the same causes, are common in localities peculiarly adapted to the prevalence of remittent and intermittent fevers, or periodical disease of malarious origin. Asthma is a stranger like intermittent fever in the midst of populous cities, where is nursed to perfection the germs of typhus. The existence of these causes may be due to the presence or absence of ozone. If in excess it hastens; if deficient it prolongs putrefaction. So that if ozone is generated in large quantities, it rapidly destroys putrifying organic matter, so as to render it partly innocuous, or if not generated it prolongs the time of the putrifying process, so as to scatter abroad pestilence and death.

The predisposing causes may be common or general. The

general may be such as act on a number of people at the same time or upon all the inhabitants of the same community. Ozone may be a general cause, developing Asthma in some and influenza in others. The odor of hay, the falling of autumnal plants, &c., may on the predisposed become a general cause.

If Asthma has a specific cause it is not yet known. There are cases which have been developed by the inhalation of powdered Ipecac, without the patient having a hereditary predisposition. It is well known that Ipecac is an irritant to all the mucous membrane. This cause of Asthma may be come predisposing, and in the same way ozone may be predisposing and exciting.

*Treatment.*—To wisely adopt in every instance a remedy to disease in all its protean forms, is of difficult attainment to the physician. But the perfection of medical skill must be in truthful diagnosis, and in the finding out an individual remedy for every individual disease. To do this it is necessary to isolate every disease, to understand the functions of every organ with their physical relations, the manner in which their functions are performed, whether they may be morbid or healthy, to have an absolute idea of disease, and be enabled to trace it to its remotest, as well as minutest bearing. When this is done the remedy may be readily selected, more easily found, and when discovered better understood. A disease to the physician should indicate the remedy, if it have any.

To the profession, as yet, the treatment of Asthma is vague and uncertain. This may be in consequence of its pathology not being understood, and its cause not known. To treat symptoms in accordance with *their* indications would comprise nearly all that is known of its medication. That is, if the pulse is full and bounding, the face flushed, &c., and the patient young and robust, why the lancet must be used. So with all other symptoms, let them be relieved by their appropriate and customary treatment.

For convenience and proper classification, the treatment of Asthma may be divided, first into that which is done during a paroxysm, and secondly what is done in the interval for its relief.

As Asthma is a spasmodic disease, perhaps it will be well

to notice what anti-spasmodic will be the most useful in the treatment of the disease during a paroxysm. These remedies are generally taken into the stomach. Their influences are then transmitted to other parts through the agency of the nerves, and as these act as curative so may others act as morbid agents, and in the same way the mucous membrane of the lungs may be a nucleus for the germs of Asthma. These germs may be different—hence we may have different *types* requiring different remedies. We may see this truth illustrated in the variety of idiopathic fevers. Each kind or variety depends on a specific, sufficient predisposing cause. These differences depend on a variety of circumstances, such as elementary combinations, states of the atmosphere, moisture, heat, light, and electricity. Predisposition, when these agents act, frequently gives the features and individuality to disease. Since the types of Asthma may be different, remedies should be directed to the diseased organs, and to their real conditions; ever remembering in our treatment the spontaneous changes which must occur, while the disease progresses or declines, and that these are modified by remedial agents, and by sympathies with other organs.

The anti-spasmodics used in Asthma, embrace nearly all of the narcotics. But only a few of these will now be pointed out, as it is not thought that any of them act as *curative agents*, but only as palliatives. Opium and its various preparations are always useful. These should be administered after the action of an emetic, if the stomach is full. The anodyne preparations may be combined with Tinctura valerian, or Nitrous Ether. These remedies will lessen the irritability of the mucous membrane of the pulmonary tubelets, and will relax the pulmonary constriction.

For certain forms of Asthma preparations of the Atropa Belladonna, and Datura Stramonium have been highly extolled, especially the latter when smoked like tobacco. They both dilate the pupils, and the former produces excessive dryness of the throat, which is very disagreeable. Some had rather have Asthma than to suffer the effects of these poisons. Stramonium lessens the contractile power of the muscular fibres of the bronchi, as proven by the experiment of Williams on the lungs of animals. These muscular

fibres when so relaxed are not susceptible to the action of galvanism. Again others are relieved by the use of tobacco.—Smoking the pipe is the most common and preferable method, but this soon loses its medicinal virtues. The tincture of *Lobelia Inflata* is spoken of highly by many as an anti-spasmodic in Asthma, but if it has any virtues they are due to its effects as an emetic. The Tart. Antimony and Ipecac is preferable.

There are many other remedies which may be used during a paroxysm, by far superior to the foregoing.

In the first place, immerse the feet and legs up to the knees in hot water, make cold applications to the head, and mustard to the spine, and if an emetic is demanded administer a warm solution of chloride of sodium, or common salt. If the patient is not relieved by this treatment, recourse must be had to other palliatives, such as the inhalation of chloroform. Sulphuric Ether and the deutoxide of Nitrogen. If these fail, or if they cannot be had, make a solution of the Nitrate of Potassa, in which dip the white tissue paper, dry it, tear thin slips, so that they may be burnt without making much smoke, set this on fire and draw it through or before the opened mouth while burning, and take deep inspirations, so as to inhale the smoke. Often this will relieve sooner than anything else, especially when expectoration is deficient.

The inhalation of vapor of water, medicated with Tannin, Creosote, and Chloroform is often very soothing, diminishes the erethism of the nervous system, and renders expectoration less difficult. The treatment, during the interval has to be varied according to circumstances. If the patient be old, feeble, and ossification of the cartilaginous portion of the ribs has taken place, but little can be done. Such medicines as may tend to strengthen should be used; vegetable tonics, such as Tincture Cinchona, Gentianæ, &c., combined with gentle expectorants. But in many instances the mineral tonics are preferable, especially if the patient is very pale.

If the paroxysms supervene, as they generally do, periodically, S. quinine and Fowlers solution of Arsenic should be administered, as in intermittent fever. No remedies according to the experience of the writer, have such controlling influence over the disease, which prove to his mind that the causes

of Asthma, not *symptomatic Asthma*, are nearly identical with those of the periodical fevers. These remedies may be combined with tonics, expectorants, and anodynes as symptoms require.

The inhalation of medicated vapor generated from liquids or solids, are often found beneficial. These vapors may be made in various ways. One of the most convenient is to place the substances from which the vapor is to be generated in the "inhalator," and then heat "*pro re nata*." The vapor of Iodine, Stramonium and Aconite, well mixed with the atmosphere, will, it is believed, by protracted use, remove the hypersensitiveness of the mucus membranes of the bronchi, or the erethism of the respiratory nerves. The combination of creosote and many of the narcotic liquid extracts may be combined with other medicinal agents in gaseous form to suit the condition of each patient, according to their common therapeutic effects, and the wisdom of the practitioner.

The writer once knew a physician to administer a teaspoonful of the Spirits Turpentine mixed with a mucilage of gum acacia, during a paroxysm, which gave great relief in some ten minutes. The patient being a doctor asked his physician why he gave the Turpentine; his answer was, "I gave it to an old woman in a similar situation, when I had nothing else to give, and it relieved her. I now give it to you because it was a benefit to her." I have since found it an excellent remedy, during the paroxysm, for the old, besides it may be given occasionally with good results in the interval. Its therapeutic action is perhaps similar to creosote, and besides it has a direct diuretic tendency and acts on the superficial capillaries and also on the dermoid tissue.

The Asthmatic should use, during the interval, the cold bath, or sponge the chest and body every morning with cold water, and rub the surface of the entire body until the skin is reddened. If the cold should produce, (from debility,) too great a shock, use the flesh brush, and only place, on rising out of bed, the feet in a basin of cold water. This alone will lessen the susceptibility to cold. A small blister on the cervical vertebræ, kept vesicated by repeated applications, and the application of croton oil to the breast and lower portion of the throat, are by some considered highly curative, but this notion does not correspond with the experience of others.

Electricity has been highly recommended by some of the most learned of the profession; but others again who are Asthmatics, experience very disagreeable sensations when even in the vicinity of a large electric machine when in operation—though electricity in some of its forms may be curative, as for instance, galvanism, though its action must be slow and only alterative in its character. The manner of applying it may be seen, by referring to Dunglison on new remedies.

The writer does not believe that in one sense Asthma is curative, in another he believes that it is. Asthma is cured in the same sense that intermittent fever is; though the predi-position and tendency to recurrence is greater in the former than in the latter.

The writer, in conclusion, will say that what has been suggested as curative agents have been seen and felt. Should any have discovered a permanent cure—a remedy better than any suggested, why suffer me to beg you to let it be *immediately known*.

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*Convulsions in Children.* By J. J. SCOTT, M. D., of Oxford, Mississippi.

THE very thought of convulsions or “fits,” carries with it terror to the friends of those threatened with spasmodic disease. This is not so much to be wondered at, when we remember that the subjects of convulsions, not only are thrown into a state resembling articulo mortis itself, but that certain forms of spasmodic affections, are heart-rending to look upon, and hopeless as regards a cure. Many cases of Epilepsy, Tetanus and hydrophobia are of this kind. Instances of such being indelibly impressed upon the mind, it is not surprising that the greatest dread and alarm is excited, not only in the mother, but the physician also, where spasms ensue upon comparatively trivial causes, which may be readily removed, and the sufferer restored to consciousness, without leaving any particular liability to its return.



Worms, hooping cough, and in fact any inflammatory or painful disease, in children, may lead to muscular spasm, having, in many instances, all the characteristics of epilepsy.

In children, from the great mobility of the nervous system, any protracted or excessive irritation in the alimentary canal or elsewhere, is liable to induce that state of the nervous centres from which convulsions result. This may be brought about without any actual irritation or congestion of the centres themselves, but by means of the strong sympathy and intimate connection of all parts of the body, with the great source of nervous power.

Temporary disturbance of the brain itself, from a general febrile excitement, and by mechanical causes, producing congestion and compression of the organ, lead to these distressing symptoms, which, although it is possible for a permanent convulsive habit to renew, generally passes away with the cause of the disturbance.

The mechanical force applied to the large blood vessels situated in the thorax and abdomen in the act of coughing, made violent and protracted by hooping-cough, favors, in children of full habit, unpleasant congestion of the brain.

Inflammatory diseases of the throat and other parts contiguous to the brain, by the excitement and consequent flow of blood to neighboring parts, sometimes result in temporary congestion and depression of this organ.

Such cases sometimes excite great alarm, when nothing is required but to restore the equilibrium of the circulation.

A case in point: On the 28th April was called to see a little boy, aged 3 years, who had for several days been affected with croup, but to within a short time before I saw him, was supposed to be convalescent. I found the little patient violently convulsed. The spasmodic muscular contraction continued until, by general warm bath, cold applications to the head, cups to the temples, and sinapisms, general relaxation and an equalization of the circulation was produced.

Many similar cases are met with, in which convulsions are found to arise from such causes. Sometimes it is necessary to push our investigations and treatment still farther. When local inflammations, the irritations from teething, worms, &c., are suspected as the cause, prompt attention should, of course,

always be given to such causes, lest, by allowing, from the continuance of the exciting cause, the repetition of the convulsion, the nervous system may become so impressed that the habitual recurrence of spasm may follow. There is, perhaps, no doubt that permanent spasmodic affections exist from these very causes, which might have been prevented by early attention to the sources of irritation, by which the habit was induced.

## SELECTIONS.

*Sudden Deaths in Puerperal State from Adynamic Lesions of the Nervous Centers, etc.* Translated by the Editors, from "L'Union Medicale de la Gironde de Bordeaux."

[CONTINUED.]

2d. *Pains*.—It is especially here that the most minute, anatomical and pathological investigations have failed. The female, in the puerperal state, may die suddenly, during or after *accouchement*, from pain or nervous exhaustion, resulting from a long and severe labor. There exists in the economy only a given sum of nervous force and power. If we consult the authors who have given special attention to this question, in connection with delivery, we find evident proofs of the fatal influence of a long labor, very painful and too prolonged. When the pain is violent, says Georget,\* and when it persists a certain time, it provokes the contraction of the muscular system, it takes away all power of thought and throws the cerebral faculties promptly into an extreme collapse. A patient who dies from a major operation, when he has lost little or no blood, is stunned, overcome, and sometimes stupid; he is dejected, fatigued, broken down, and incapable of moving; he is pale; he is sometimes seized with an exaltation like to delirium, with loss of consciousness, disposition to vomit, and absolute vomiting, convulsive attacks, relaxations of the sphincters and involuntary dejections. Death has been the result of the pain. We attribute ordinarily the collapse of the cerebral faculties which follows the perception of the pain to a wasting of the sensibility, a vague expression which explains the fact very badly and indeed does not explain it at all. We will observe that this state is the effect of cerebral excitement, and that during the pain, as in all lively sensations and the affections less strong, the brain experiences a veritable super-excitation. Consecutively to these first accidents more or less grave are manifested in the brain or other organs. The pain and efforts of the labor with women predisposed to mental alienation by hereditary influence, by previous accessions, by an acute sensibility, produces, sometimes, alone, or by the aid of the most trifling cause, the development of this disease.

Not only, says Churchill, such a shock may be observed in certain labors, especially when they have been prolonged and severe, and produce, in this way, a sad result, but it exists, to a certain degree more or less marked, in almost all cases. It requires but little observation to recognize it. Thus, after an ordinary *accouchement*, the general sensibility is almost always excessive, although the senses may be more susceptible than ordinary, the eyes lose their brightness, and are feeble and languid; the least light is painful, as the slightest noise is offensive to the hearing; and if we do not give close attention to this excessive delicacy, very serious accidents may result. In ordinary cases, some hours of repose are sufficient to overcome this light collapse; but when the labor has lasted a very long

\* Georget Dect. en 30, p. 499.

time, or when an operation, as version for example, has been necessary, the phenomena are a great deal more pronounced. Pain, when it acquires a certain degree of intensity and duration, is in itself destructive. Difficult and prolonged labors become very often mortal from this cause; and even when there are no extraordinary difficulties, and when the labor is not too prolonged, a fatal prostration supervenes, whose explanation is only to be found in the pain. Delivery has been complete without any physical lesion, the woman has lost but the ordinary amount of blood from the uterine vessels, and in spite of the encouragement which she feels from her general condition and that of her infant, as well as from the conviction that her sufferings are at an end, does not regain her strength, nor her courage; but after an interval which does not exceed some hours, she falls into a state of prostration and sinking, and some hours afterward, in a manner quite unexpected and without any perceptible alteration, dies.\*

Where is the physician, who has had any practice, who does not know the influence of a long and painful labor on the mother? At the moment of the accouchement, the uterine contractions succeed each other, and attain very soon a high degree of intensity known under the name of expulsive pains. Nature will very soon fulfill her end, if no obstacle intervenes to arrest the escape of the child; but if a contraction of either strait exists, a vicious position, a tumor, any obstacle whatever, the uterus will wear out against it all the power it has to furnish the labor, and then, exhausted with its vain efforts, it ceases entirely; but the child remaining in the uterine cavity, causes by its presence, new contractions, convulsive contractions, which determine, in the entire economy, a state of irritation and fever, followed by the most fatal accidents.

The face is then burning, the whole body is covered with sweat, the eye is fixed and haggard, its expression is sunken; the unhappy woman cries out, laments, begs for death, and calls out for some one to kill her, or put an end to her sufferings. The disturbance of the intellectual faculties, well marked, is sometimes complete, and they make, during their delirium, the most extravagant remarks. The cerebral excitation produced by the violence of the pain may end in insanity, and, in certain cases, physicians devoted to medico-legal medicine, have found, in this momentary disturbance of the intellect, the explanation of infanticides that all other circumstances left unintelligible.†

Observation 7th. A woman, whose pelvis was horribly deformed, was brought to us after the cranium had been perforated, and an attempt made to apply the crotchet. I made some tractions with M. Baudelocque. We employed, without success, all imaginable means. The cranium came by scraps at the point of the crotchets; it was necessary to stop, and during this moment of repose, the woman expired, retaining the child in the uterus. [*Memoires de Mad. La Chapelle*, t. 2, p. 227.] Those who devote themselves to the delicate and difficult part of *accouchements* in the midst of a great center of population, have more frequent occasion to observe these cruel terminations. I shall cite some examples. The two first were communicated by my father. The third came within my own observation.

\*Travers' Inquiry 2d edition, p. 48.

† Cazeaux, p. 413.

**Observation 8th.** Mrs. X. of a good constitution; she is robust, 30 years of age; had, about two years ago, her first child. The child was delivered with forceps. At the second confinement, my father was called. No unusual symptom was present. The labor proceeded regularly during the first contractions; but when dilatation was complete, the head did not advance, and the woman exhausted herself with her vain efforts. In consultation, the application of the forceps was decided on. The introduction was easy, but tractions very sustained and continuous were necessary to bring away a voluminous and living child. The patient had suffered very much; she had expressed her sufferings in the most violent terms. The labor being over, she felt better, but overcome. The placenta was delivered a few instants after. The uterus contracted; the hemorrhage amounted to nothing. Very soon she manifested some contractions of the muscles of the face, the pulse became weak, and she expired suddenly. An autopsy was made.

**Observation 9th.** A woman in the country, of 28 years of age, in labor for two days, sent for us, with another confrère. We arrived at the house, and found a narrowing in the antero-posterior diameter of the superior strait. The forceps were applied in vain. The head, moveable and very high up, escaped from the forceps. Version was decided on, and was completed without very great difficulty, but the head remained a long time above the superior strait. By force of traction, it was expelled, and very soon the labor was finished; but at that very instant, she died—exhausted from pain.

In a notice on the presentation of the fact, read before you in 1850, I cited a case which terminated in the same fatal way.

**Observation 10th.** In 1848, I was sent for to see a lady 30 years old, who was in her second labor. M. Labayle was in attendance. The face presented excessive agitation, exaltation of the intellectual faculties difficult to be described, pains for more than eighty-four hours. On my arrival the pains were terrible, incessant, and each of them caused the patient to make frightful cries. Later, my father joined us, when the forceps were applied uselessly. Pelvic version was decided on. I accomplished it with the greatest trouble; and, after the most prolonged efforts I brought away a dead child. A half hour after she expired suddenly.

The following fact was communicated to the *Gazette Médicale*, in 1837, by M. Villeneuve, of Marseilles:

**Observation 11th.** Ten days of pain, face pale, tongue dry and white, violent pain in epigastric region, uterus molded on fetus; after some repose, a bath, anodyne and excitant potion; forceps, but a single branch; craniotomy. The child was extracted, and the mother died two hours afterward.

Thus then, after, as during an accouchement, the fatal influence of effort and pain on the nervous system can not be mistaken. M. Cazeaux believes, with Churchill, that it consists in a more or less considerable shock of the cephalo-rachidien system. This shock is the result of the extraordinary disturbance produced by the parturition, and is in every respect like that produced by severe wounds, and from which the unfortunate workmen, whose extremities are crushed by machinery, sometimes die. This rapid and prompt form of death, which neither the circumstances of the accident, nor the lesions observed at the autopsy explain, is attributed by surgeons to the nervous shock. In all these cases, the

nervous system plays a very important role; suffering greatly from shock, worn out by the sufferings of child-birth, the cerebro-spinal apparatus may often resist, but it has often a great deal of difficulty to recover from these successive shocks; it remains exhausted, without any power to awaken a last spark of life, and the autopsy does not teach us any thing.

The very excellent experiments, reported some years ago by M. Magendie, remove all doubts touching the influence of pain in the production of sudden death. If on a living animal we excite pains extremely acute, as for example, in piercing the posterior and spinal roots; if, previously, a graduated bent tube, containing mercury, has been introduced into the carotid artery, each painful sensation is marked by a moment of arrest in the contractions in the left ventricle, immediately followed by a repetition which carries the sanguine column higher. If these painful contractions are repeated too often, if the animal is weakened, a time arrives when a quick cessation of the contractions become definite: the animal is dead. In whatever point we excite pain, the result is the same."—*Cincinnati Medical Observer*.

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Here is something refreshing to see, a generous tribute to the services, and acknowledgement to the debt of gratitude owed to the family physician, so different from the experiences of flagrant ingratitude which are his daily portion, that we are tempted to copy it. It is taken from the *Advocate and Family Guardian*, published by the Executive Committee of the American Female Guardian Society, and edited by Mrs. Sarah R. I. Bennett.

*The Family Physician.*

Beautiful and benign is that Providential arrangement that "setteth man in families like a flock"—that dots the face of earth with those homes where cluster loving hearts and kindred faces, and from whence flow out the purest and holiest of human sympathies.

How is the whole frame-work of society dependent upon the influences and contributions of the family! The little rills that bubble up by ten thousand hearthstones, and from thence glide noiselessly abroad, are rills of influence whose power for good or evil no human arithmetic can compute. Individually, they may permeate the body social unrecognized. Collectively, they constitute those broad and sweeping rivers whose currents are irresistible, and which bear upon their bosom the barque of Church and State, freighted with all the most precious things of life.

Truly and nobly do they serve their generation who do aught to educate those sympathies and influences whose birthplace is Home, or who labor to direct them into those channels where they will most beautify and bless. They serve it best who do the most in this direction. Parents and teachers are not the only educators of the household. It throws out its tendrils and shoots forth its fibres in every direction, laying hold upon and appropriating for its nourishment and culture all the resources of society.

The Pastor, who appreciates the dignity and importance of the family institution, and who is thoughtful and earnest for the generous and perfected culture there, is a most potent educator. The Family Physician also *may be*, and frequently *is*, one of the educators of the household. What opportunities has he daily and hourly for scattering precious seed! What resources for acquiring and wielding an influence over mind are at his command! He who ministers to the domestic circle in the visitations of disease and bereavement, should be a personage of no inferior position and importance there. A Pastor's influence is often secondary to his. He is not only the dispenser of curative agents, but often *needs to be* of those moral influences which soothe when anguish rends the soul, or sustain when it is ready to sink in hopelessness and dismay. He is the one upon whom the timid lean in their weakness and fears—to whom the dying look and cling as the ebbing tide bears them from the shores of time; for whose footsteps the suffering and anxious watch, and whose changing countenance or expressive demeanor are studied as if he were the oracle of fate.

Unquestioned, he has the *entree* to the inner sanctuary of the home, whatever aspect it wear. To him is the chamber of sickness and seclusion accessible when the footfall of the nearest friend is scarce permitted within its precincts. When a new life, with its wondrous mysteries, unfolds itself within the household circle, and they rejoice over it, and when death with its solemn mystery is a pale guest there, and they mourn in bitterness, *he is also* there. In the unrestrained raving of delirium—in the prostration and mental weakness disease brings in its train of evils—divested of the guises we wear in health and before the world, do our characters lie open to the inspection of our Physician, and we are dependent upon his offices and his cares.

How important, then, that he be carefully and wisely selected. How many qualities beside professional skill are requisite to constitute such a Family Physician as every household needs! If any profession demands of its members every quality that ennobles and adorns *the man*, surely it is the medical profession.

Many families neither know how to select with discrimination their Physician, nor wisely to avail themselves of all that might profit them in the relationship. Delicacy and propriety, as well as many advantages, attend a *permanency* in the relations between a family and its medical attendant. There is a loss of much that is valuable in a frequent and promiscuous change. He who watches over the health of a family group from the first buddings of infancy up to its maturity, *must* feel an interest and solicitude for that group, which *he could not* who is called in the emergency of to-day and dismissed, when it passes away, to-morrow. A familiarity with its idiosyncrasy, and the yearly augmenting professional experience, will conduce to increasing safety and confidence in his practice in the sick room, while he who is for years identified with the family circle will give it that earnest thought, patient care, watchfulness, and sympathy, both in threatened and actual danger, which gold alone could not buy.

A thorough professional education is with most intelligent families an indispensable requisite in their medical adviser. If we are to have charlatans and ignoramuses in any profession, let it not be in this, to whose skill and care we commit, when it is disordered and suffering, this wonder-

ful frame of ours—this delicate mechanism to which is so mysteriously linked the immortal spirit.

Next in importance to professional skill in a Family Physician is, methinks, integrity of principle and genuine piety. Who so frequently as he has need to commit the dying and the bereaved to the tender mercies of the Great Physician, as he rings the knell of their earthly joys in the fearful, reluctant utterance—"No hope—he *must* die!"

A Physician should also be one competent to judge of the moral and mental conditions of his patients, and "to minister," if need be, "to the mind diseased." The *moral prescriptions* he makes—his firmness of nerve, his power of self possession, his talents for social cheer, and the hope and courage he inspires—are frequently of more importance to a sufferer than any draft he may make upon the *Materia Medica*.

It may be that we should more frequently find the Family Physician cultivated in all those qualities that would make his intercourse with the home circle imposing, and as ready to impart information and an *educating influence* as he is to dispense his medicines, if we duly appreciated such qualities, and better understood the mutual obligations of the relation. There is sometimes a backwardness and grudgingness in meeting a Physician's pecuniary claims, which is embarrassing to him and discreditable to those for whom he labors. When sickness lays its hand upon us, and we writhe or faint under it—or when death stands waiting for its prey—we feel that if our Physician will spare no effort to save from the threatened danger, he may "ask of us what he will, even to the half of our kingdom," and it shall cheerfully be given him. But when the portentous cloud has passed from our sky, and our fears have vanished, we sometimes forget his watchings, anxieties, and services, and spend upon our own convenience or extravagancies what is rightfully his.

Physicians as a class are far from a mercenary one. If there was with them no *necessity* in "the bread and butter of life," how many would gladly make their profession subservient only to the relief of suffering humanity and the advancement of science.

To those who most adorn the profession there is accorded a nobler wealth, a purer and finer compensation than gold can proffer. Few comparatively become wealthy as early in life as those in other branches of business requiring equal education, talents and application. The charities of this profession in time, attention, and medicines to the sick poor far exceed those of any other class in the community.

Like other men, the Physician has his susceptibilities to sympathy, and needs sometimes encouragement and appreciation. He needs co-operation with his services, forbearance with his mistakes, and the same charity for his foibles and faults that we feel we have a *right* to expect from him towards our own. Sometimes a Physician is dismissed for some slight mistake, some oversight or omission, which, from the very painfulness of his experience in consequence, he would be on double guard against ever after, and his place is supplied by one who, perhaps, falls into the same or more serious misjudgments, and in his turn is likewise dismissed. None are infallible; therefore should the ill-timed and unnecessary criticism be suppressed with the same consideration we look for him towards the weakness and faults his position enables him to discern in our own domestic circles. Nor should we expect in him creative or omnipotent power; for when the fatal arrow is sped from the quiver of the Almighty, no human hand may stay it.



Like that of other mortals, the Physician's ear must sometimes weary of querulous tones, impatient complaint, and the continual minor key of the invalid's moan. The inmates of that home who, during a morning call from their Family Physician, impart to him of those precious but intangible social influences which elevate, strengthen and cheer, many unwittingly transmit rays of sunshine and hopefulness through the whole round of his day's ministrations. Animal spirits will flag sometimes under constant drafts upon sympathy and patience, and the presence of anxiety and responsibility. Then do such influences do him "good like a medicine."

Irregular meals, loss of sleep, the driving blast or cheerless rain, and the chilly night air, are as repulsive to him as to other men. The mental quiet that takes possession of the business man's mind when he feels that his *day's work is done* the physician can also appreciate, and it would be equally agreeable to him to feel that there was no liability to an interruption of the social chat; no call from the warm, attractive fireside; no necessity for relinquishing slippers and easy-chair, and the enjoyment of a new publication or converse with family or friends.

But if suffering humanity calls, the call is imperative. Personal comfort or social courtesy must be foregone at a moment's notice, and domestic attractions exchanged for the anxious and often repulsive services of the sick-room. Let that family, then, who enjoy the friendship and services of a physician whose qualification meets their moral and physical needs; who is to them an acquisition, a *household blessing*, duly appreciate, love, honor, and sustain him. Let them remember him at the domestic altar, and in many a token and attention of social life, as they do their Pastor; and so regulate the intercourse of the relationship that there may be mutual advantages—reciprocal aids in learning how to live and in preparations for health.—*Peninsular Journal*.

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### Criminal Abortion.

We have watched with much interest the progress of the movement lately commenced by the profession in Boston against Criminal Abortion. This movement has now secured the sanction of the State Medical Society of Massachusetts, and as it will doubtless be participated in by physicians of other States, we are inclined to think its history from the outset, obtained from current numbers of the Boston Medical and Surgical Journal, and from the correspondence of a friend may prove not unacceptable to our readers.

That this crime, terrible and infamous though it be, is yet common, none who have watched the proceedings of the Courts, or have read the daily journals can doubt—and there is every reason to believe that the community on the one hand are too often ignorant of its true character, and on the other too prone to the opinion that it is frequently practised, advised or excused by respectable medical men. To meet these errors and to vindicate the profession has now been attempted. More than two

years and a half ago, in November 1855, the Professor of Obstetrics in Harvard University, (Dr. Storer, sen.), in the Public Address introductory to the Annual Lectures, took occasion to call attention to the prevalence in this country of Criminal Abortion, and the equally injurious and immoral practice of preventing pregnancy.

The sentiments then expressed were received with approbation, and were requested for publication. Fearful however lest its pecuniary interest might suffer, whether at the hands of the public, one of whose prevailing sins had been so boldly and directly assailed, or of the profession, whose lethargy in this matter and subservience to expediency had been rebuked, the college interfered, and at the express desire of its faculty, but, as we now learn, entirely against the author's will, such portions of the address as bore on Criminal Abortion were suppressed in the published copy.

With the exception of a similar address by Dr. Hodge of Pennsylvania, no other public action against the crime of abortion, seems to have been taken until now, by any of the profession in this country.

In February of the present year, Dr. Storer, Jr., (Horatio R.), of Boston, having ascertained that his father had abandoned all intention of prosecuting his original proposal, brought the subject before the Suffolk District Medical Society. In a few preparatory remarks:

"Dr. Storer quoted statistics from a recent memoir by Tardieu of Paris in the *Annales d'Hygiene Publique et de Med. Legale* for 1866, showing how common was the crime in this country as compared with others; so common indeed as to have led foreigners to suppose that the procuring criminal abortion was with us an ordinary and well established branch of industry, not interfered with by the Law; as indeed to all intents and purposes is at present the case.

Dr. S. referred to our statutes on this subject and to the ignorance prevalent in the community respecting the actual and separate existence of foetal life in the early months of pregnancy. He dwelt on the moral and absolute guilt of the parties offending and on the necessity of prompt and efficient action by the profession, and called upon the Society, as representing the physicians of Boston, to take such steps as would alike ensure the innocence in this matter of all its members, and show to the community the sincere abhorrence with which they viewed the crime.

In conclusion Dr. Storer offered the following resolution:—"That a committee be appointed to consider whether any further legislation is necessary in this Commonwealth on the subject of Criminal Abortion, and to report to the society such other means as may seem necessary for the suppression of this abominable, unnatural and yet common crime."

To which, at the suggestion of Dr. Jeffries, was added this amendment:—"And that said report when accepted by this Society shall by it be recommended to the Massachusetts Medical Society, as a basis for its further action."

The resolution and amendment were unanimously passed, and Dr. H. R. Storer, Bowditch and Ellis appointed as the Committee.

At the April meeting the committee submitted their report, which was ordered to be printed. It gave rise to much discussion, both in private and at a special meeting of the Society called early in May; part in the debate being taken by most of the leading practitioners of the City.

The Committee, after due deliberation and under advice of eminent

Criminal Counsel, were of opinion that under the existing law of Massachusetts convictions were impossible, and they therefore reported a draft in substitute for the present statutes, during the preparation of which "they had addressed letters of inquiry to distinguished Physicians in every part of the Union, and received answers relative to the statutory laws of twenty-one States, accompanied in several instances by the opinions of leading advocates and Judges, for them procured."

The report itself was acknowledged to be able and forcible, but to the draft many objections were made. Gentlemen of the timid or ultra-conservative schools were not prepared to meet the issue face to face; and to ensure as much unanimity as possible in the matter, the Committee, by permission of the Society withdrew this portion of the report, which as thus amended by them was accepted at the regular May meeting, and the following resolution passed:—

*Resolved*, That the subject of Criminal Abortion demands the attention of the Medical Profession of the State.

*Resolved*, That the Massachusetts Medical Society be urged to take action in the premises, and, if it deem expedient, to present the subject for the consideration of the Legislature.

In pursuance of this latter resolve, the same Committee by direction of the Society, brought the matter on June 3rd, before the Massachusetts Medical Society at its annual meeting at New Bedford.

By special vote of the Society, its rules were suspended, and:—

"The debate was warmly and ably sustained for about an hour and a half, the principal speakers being Dr.'s H. R. Storer, J. Bigelow, J. Ware, and Ephraim Buck, of Boston, C. C. Chaffee, of Springfield, and Henry H. Childs of Pittsfield. The resolutions offered by the Committee were finally referred to a Committee consisting of Messrs. F. Hooper of Fall River; J. Bigelow, J. Ware, Chas. Gordon and H. R. Storer, of Boston; J. C. Dalton of Lowell and E. Hunt of Danvers, who are to report to the Councillors at their next meeting."

The discussion of this question has thus fairly begun, and the attention of the Profession will undoubtedly be engrossed by it throughout the land. As we are in possession of a copy of the Committee's report, we shall freely quote their argument:—

"The frequency of Criminal Abortion in Massachusetts though already notorious, is much greater than is generally supposed, and it is probably steadily increasing. It is confined to no class of persons, neither the poor, the ignorant nor the unmarried; indeed among the married, the crime seems more common than among those who have the excuse of shame.

These statements might be doubted by gentlemen, who, for whatever reason, do not happen to be personally familiar with the fact. They are nevertheless strictly true. Statistics of abortion do not exist, and for evident reasons, reliable ones cannot be obtained. The instances of its occurrence, even when accidental, in advanced pregnancy, are but seldom reported to the proper authorities, who acknowledge that many of the so-called still-births, are in consequence of induced abortion. 'Undoubtedly more than a hundred such, yearly escape being recorded (in Boston), a large proportion of which no doubt result from criminal abortion.' (Extract from a letter of the City Registrar, Mr. Apollonio, to the Committee, March 26, 1857.)

Common as the crime may be in an advanced stage, after the existence of pregnancy has been made certain by its more evident signs, it is infinitely more common in the early months, before motion has occurred, when so many believe that the child has not yet received life.

It is impossible for the Committee to furnish statistics in this matter; but lest their premises should be denied, and as the experience of a single individual, it may be remarked that in no less than *fifteen* instances during the past half-year has the chairman been called to treat the *confessed* results, near or remote, of criminal abortion; and of these patients, all without exception were married and respectable women. This very prevalence of the crime, which has hitherto obtained to an equal extent only in barbarous or heathen nations, is found almost to protect it.—It escapes punishment by law. Many cases in proof of this might be instanced from the records of our courts; the three given in the City Registrar's report for the past year, (page 18), will, however, suffice. It has found public and unblushing defenders, who have so blunted the moral and religious sense of the people, that many respectable women do not hesitate to avow their belief that abortion is no crime.

The impunity with which the crime is committed is mainly owing to four different and separate causes:—

1st. The present *morale* of the community in reference to the subject;

2nd. The great caution generally observed by the perpetrators of the crime;

3rd. The fact that both operator, where such has been employed, and patient, are extremely desirous of concealment, and so can seldom be produced as witnesses; women frequently inducing criminal abortion upon themselves, either by drugs, over-exertion or instruments, without the knowledge, advice, or aid of others; and

Finally, The defective character of the law itself.

To check this evil, a change must be effected in public opinion. By whom shall this change be begun? There is no use in longer silence or in attempting to conceal what is but too evident. It has clearly become the duty of the Medical profession, as the guardians of the public health, if for no higher reason, and as those who, of all others, sooner or later in almost every instance become cognizant of the crime, to declare its true nature, its prevalence, and deplorable consequences; to denounce it in unmeasured terms, and, where possible, to point out and to enforce efficient means for its suppression.

The ways in which the popular ignorance respecting its actual guilt, its immediate dangers to the mother, and its effects on subsequent health, can best be enlightened, are self-evident. In private, among his families; in public from his professor's desk, from the pages of his journal, or from the witness' stand, the physician is called upon by every dictate of humanity and religion, to condemn it.

That the Massachusetts law is predicated on an entirely erroneous idea of the true nature and guilt of criminal abortion, is evident from its very face. The crime is here considered as one against the person of the woman, and against her alone. If she die in consequence of the abortion, a certain penalty is provided; if she do not die in consequence thereof, though the abortion be fully accomplished, a comparatively trifling punishment is inflicted, less even than that ordinarily given to simple maim or mutilation.

The error is one of intent, which in reality is seldom against the life of the mother; in almost every instance, she is herself, not merely an attempt at the murder of herself, for that would be simply absurd, but the murder of her child.

The law is here fundamentally wrong. It utterly ignores the existence of the living child, though the child is really alive from the very moment of its conception, and from that very moment is and should be considered a distinct being; this the law does not, however, recognize. The fœtus is not as has been so often alleged, merely *pars viscerum matris*; though upon such belief our law is evidently based.

‘It would be hard,’ writes an eminent lawyer of this city to the Committee, ‘to find in the moral law the distinction made in the civil law, between causing the death of a child before and immediately after his birth. Before the birth, though the civil law recognizes the existence of the child for some purpose, still so far as personal injury is concerned, its being is engrossed, so to speak, in the mother.’

The argument that the perils and dangers to which the fœtus is naturally subjected during its intra-uterine life should lessen the criminality of attempts at its destruction, is unworthy the profession, and should not be allowed in law. These perils do not exceed, if indeed they equal, those which threaten the new-born child. Yet these last would hardly be allowed to invalidate a charge of infanticide.

The crime, when a living fœtus has been destroyed, is clearly murder. But as there are those who will not allow that it should be punished as such, it should in all cases, whether the mother lives or not, be regarded as at least felony by the law, which now in most cases, declares it but a simple misdemeanor. In cases where both lives are lost, its guilt is proportionally increased. If wilful intent against the life of the mother thus destroyed could ever be proved, the indictment should then be for murder.

An article of the penal code of France, as drawn by Napoleon, provides an increase of punishment where criminal abortion shall have been induced or advised by physicians, surgeons or other officers of health, or by druggists. We may well imitate this example. If it be determined that the crime must be checked, how great seems the guilt of those who intentionally use, to destroy life, the knowledge by which they are pledged to preserve it.

By our statutes, as at present standing, the mother can hardly be reached for her part in the crime. This should no longer be. Unless proved insane, the wretch who had caused the death of her offspring, perhaps by her own hand, should be made to suffer corresponding exposure and punishment. If married, as is too often the case, her crime should be considered as infinitely increased.

Much of the public indifference and error on the subject of criminal abortion is owing to the influence of certain misguided or brutal men, who by their publications or lectures, have given rise to a belief that the induction of abortion is alike the prerogative and duty of the married. Such offenders, whose guilt should be measured by their numberless victims, are at present beyond the reach of the law; but, as evident criminals, they should be punished. The community should be made to understand and to feel, that marriage, where the parties shrink from its highest responsibilities, is nothing less than legalized prostitution.”

The Committee have so far achieved a triumph. At the last Boston

meeting, their Report was warmly contested, but accepted by a close vote. At New Bedford, the debate being participated in by gentlemen from all parts of the State, many of whom are unmentioned in the brief report of the Boston Medical Journal it was evident that the majority of the Society was decidedly in their favor; and from the character of the men composing that committee, we are confident that they will not rest till they have secured all they desire. They aim at an open and general condemnation of the crime by the profession, and at thus removing the imputation now so generally considered as resting on its fair name. They aim at exposing, and even if better laws should be found valueless, at thus, to some extent at least, controlling and checking the crime.

In this connection, we cannot forbear noticing an infamous statement that appeared in a late number of the Boston Medical and Surgical Journal; it is from an anonymous stricture upon the Committees Report.

We are led to understand by the unsatisfactory excuse for the statement referred to, offered by the editors in a subsequent number of the Journal, that it was at once branded as a *libel upon the profession*, at the ensuing meeting of the Suffolk District Medical Society.

We quote the following:—

“Argue as forcibly as they may, the Committee will fail to convince the public that abortion in the early months is a crime, and a large proportion of the medical profession will tacitly support the popular view of the subject.”

This assertion, taken in the sense most naturally suggesting itself to any one, would then seem no less than a deliberate falsehood, and would tend to prejudice the profession, wrongfully and dangerously, in public opinion; and when our brother editors admitted, in their apology, that they were for a moment, “willing to allow that this is capable of a construction which would imply a libel upon the profession,” they assumed a position strangely at variance with that in their issue of December 13, 1855, when they so eloquently asserted that:—

“For ourselves, we have no fear that *the truth*, as told by the writer of this address (Dr. Storer’s introductory) in reference to the crime of procuring abortion and the scarcely less heinous offence of preventing impregnation, would do aught but good in this, or in any city. It would appear that sheer ignorance in many honest people, is the spring of much of the horrible *intra-uterine murder* which exists among us; why not then enlighten this ignorance? It would be far more effectually done by some bold and manly appeal like that to which we allude, than by the private and scattered influence of honorable practitioners alone. In this case we will guarantee that vice will be all the more hated the more it was revealed, and would be neither pitied nor embraced.

The alarming extent of these evil practices is admitted; why attempt to conceal them any longer? Will not the mischief by and by be all the more deadly for delaying exposure and attempting relief?

If nearly every practitioner of medicine has his instances of application either to effect premature delivery or to prevent conception, what must the aggregate amount of these demands be? And how great reason have we for fully believing the ideas advanced by Dr. Storer, viz: that not only are felonious practices the source of the great diminution so visible in modern days in the families of the married; but also that the imperfect sexual connexion practiced both illicitly, and by husbands and

wives, while it of course lessens our population, at the same time lays the foundation of many uterine diseases. This is at once an important and plausible suggestion. While perhaps, as yet, incapable of being substantiated by actual proof, the balance of evidence is decidedly in its favor, and on the most natural grounds. Whatever interferes with the full and proper exercise of any function, is likely to induce irregularity in its performance, and finally organic disease. This is at once philosophical and in accordance with the will of the Creator; *Leges naturæ non impune franges*. If impregnation be prevented by the well known means so widely used, or in any way, why should we not look for the termination of the naturally aroused uterine excitement, which fails of its legitimate end, in congestion, inflammation, and final disorganization? This is a question of vital importance to any people—to all parents. In silence and by sufferance, these mighty evils are feeding on the life blood of the nation itself.

Whatever estimate may attach to our opinion, we believe that not only 'ought these not so to be,' but that the public should know it from good authority. Such an exercise of his knowledge, experience and true moral courage is not only the province but the conscientious duty of the Physician; expediency with its cold heart and leaden footed pace should be hooted from the path of usefulness and rectitude. To apprehend ill-effects and danger to public morals from telling the truth (especially when it has been too long waited for), is both a *petitis principii* and as a rule will not obtain. Rules, not exceptions, are our recognized guides."

The discussion has fairly begun, and the moral sense of the community cannot fail to be aroused and bettered. Already are the daily papers commenting on, and praising the manly course of the profession in Massachusetts, which we trust to see followed everywhere. The Boston Traveler thus closes a long article in its editorial columns, on the New Bedford debate.

"Public attention should be drawn to this last resort for getting rid of the cost and the unsatisfactoriness of young families. If all our people want to be rich, no poor folks; if all would have the luxury without the woe of life, let us take some other method than this spartan and barbaric retrogression. It would be almost as well to sink into the slough of Utah, and be 'sealed' with the polluting caresses of the Deacons of Brigham Young's temple of productiveness, as for the mothers of our land habitually to stain their souls with the smothering of infant life. Its dangers in every and all stages are not properly understood. It is one which should be thought of. Among all the mischiefs which have arisen from our gregariousness in cities and in hotels, none is more terrible than this; terrible to the mother, terrible to society, terrible to all concerned."

We feel that we may well be pardoned for first speaking at length as we have, of the connection of our Massachusetts brethren with this subject, as the war seems first to have fairly begun with them; and will only say in addition, that we have personal knowledge that the evil is no less prevalent in our community. We have in this City, a woman engaged in this nefarious occupation and with whom our authorities are unwilling to meddle, on account of her personal popularity as a *devoutly pious person*, and we have daily evidences that to procure abortion is one of the first desires of a large proportion of pregnant women. We have no pardon to ask for the length of our article, for we feel it to be a subject too long neglected, and no longer to be winked out of sight. and we will be glad

to publish any case which may be presented us, where Abortion has been produced, or attempted.

Dr. H. R. Storer has taken a stand in this matter alike creditable to his head and his heart, and we feel that he will receive the hearty thanks of every true physician.

That his efforts are appreciated by the profession at large, is evident, from the fact that he was appointed by the American Medical Association at its late meeting at Nashville, as Chairman of a Special Committee "on Criminal Abortion, with a view to its general suppression," to report next year at Washington, and may be regarded as an earnest, that the work now begun, will be carried forward.—*New-Hampshire Jour. of Medicine.*

### *Embalment. Burial.*

WEST FELICIANA, LA., March 28th, 1857.

DR. DOWLER :—*Dear Sir* :—The circumstances of the body of Dr. Kane having been "embalmed after the method of Gannal," has raised the question in my mind as to what that method is? I am aware that it purports to be, the injection into the arteries of the acetate of alumine, formed by mixing solutions of the sulphate of alumina and potassa, and the acetate of lead, and throwing down the insoluble sulphate of lead, and forming the acetate of alumine, yet he admits that this preparation, in the course of time, causes the subject to take on "all the exterior aspect of the negro," owing to the lead still held in solution combining with the hydro-sulphuric acid disengaged by the decomposition of the body; in fact, this process seems only intended for the preservation of bodies for dissection, as he acknowledges in more than one place, that he retains the secret of embalming for his own special use and benefit. As my copy of Gannal's work on the subject dates back to the year 1840, and only gives (or pretends to give) his researches up to 1838, and that in a very (to me) obscure manner, my information may be old; and for this reason, I am induced to ask whether or not his researches have been continued, according to promise, and if so, what is the result? In fine, what is the method of Gannal? and does any one really possess a knowledge of a method of preserving the bodies of the dead for any length of time in any climate, except those known to possess the property independently of any artificial process whatever? and if so, what is the method? An answer to these queries through the columns of the New Orleans Medical and Surgical Journal, would be particularly gratifying to me, and, no doubt, interesting to many of your readers. Respectfully yours, etc.,

W. T. COX, M. D.

—"Embalm me,  
Then lay me forth."—SHAKS. Henry VIII.

—"Thy virtues are  
The spices that embalm thee; thou art far  
More richly laid, and shalt more long remain  
Still mummified within the hearts of men  
Than if to lift thee in the rolls of fame  
Each marble spoke thy shape, all brass thy name."—HALL.



The *Gazete Médicale de Paris*, No. 46, anno 1851, contains a report on the substances used in embalming the dead. This report is an official one made by a commission appointed by the Academy of Medicine, and is an answer to the request made by the Minister of Agriculture and Commerce; the latter having consulted the academy agreeably to the advice of the council of health, in regard to the interdiction of embalming with poisonous substances. The commission consisting of MM. Orfila, Bussy, Chevallier, Poiseille, and the reporter, M. Caventou. The result of their deliberations may be summed up in the following dense translation: The recognized agents, adapted to the preservation of animal bodies, as proven by numerous experiments, are partly derived from the mineral kingdom; such are certain alkaline and earthy salts, as the chlorides of potassium or sodium, the sulphate of soda, the nitrate of potass, the aluminous salts, etc., but all such are quite limited in their preservative powers, unless associated with arsenic. The use of the metallic salts, such as those of zinc, mercury, lead, copper or iron, is, to a certain extent, poisonous. Arsenical preparations have been already proscribed by a law passed October 29, 1846, since which, corrosive sublimate has been much used; also the acetate of lead and the salts of copper. The dangers incidental to the employment of these poisons, ought, as the commission think, to exclude them from use in embalming the dead.

M. Bussy thought the report too absolute in maintaining that no substance devoid of arsenic can be relied on. M. Gannal affirmed the contrary, and M. Chevallier, who had examined a great number of preparations made and intended for embalming the dead, found that they contained no arsenic. M. Bussy thought that the salts of alumina which are convenient and useful for embalment should not be interdicted.

M. Caventou denied the efficacy of aluminous salts in embalming, unless the body be buried in the earth. M. Bussy, however, said that he would not oppose the adoption of the report.

M. Orfila said he had examined M. Gannal's preservative preparations, which he found not *lightly* but *very strongly charged* with arsenic. After having examined M. Gannal's first preparation for embalming, M. G. directed the commission to a second kind which contained no arsenic, but which did not preserve the body from running into horrible rotteness: "*Les cadavres injectés avec ce liquide furent trouvés, au bout de quelque temps, horriblement pourris.*" M. Orfila denied the efficacy of aluminous salts for the purpose of embalming the dead.

The Academy adopted the conclusions of the report, (Nov. 11, 1851.)

Some time subsequently to this report of the Academy, the following statement concerning M. Gannal's reputed discovery appeared in the public journals:

"*Verification of an Interesting Discovery.*—Dr. Quesneville, the editor of the *Revue Scientifique* of Paris, in a late number of that journal gives, an account of some experiments, at which he was present, to test the merits of a new discovery in the art of embalming. 'Agreeably to the invitation,' he says, 'which was addressed to us in common with a large number of physicians and journalists, we were present at the exhumation of a body that had been embalmed after the method of Gannal. This took place in the cemetery of Père La Chaise, and we were attracted by no ordinary feeling of mere curiosity. A recent report of the Academy of Medicine had called in question the reality of this discovery, supposed

indisputably established. A public defiance had been thus given to this celebrated embalmer, who was not slow in taking up the glove thus thrown to him. We found on the spot, a large concourse of curious spectators; but the family would not consent to admit more than six physicians out of more than 150, who came to ascertain the result of this curious exhumation. The body in question, embalmed in 1844, was found in a perfect state of preservation. Thus have failed, therefore, these inexplicable efforts of this learned body, after so short a time, to destroy the reputation of a discovery extolled by their own published testimony."

Embalming, which is very rarely practised in the United States, is deemed of great concernment in some European countries.

"*Embalming in France*—It is a singular fact," says the London *Lancet*, "but nevertheless true, that in France, at the present time, (1844) the higher and richer classes are nearly as much in the habit of embalming their departed relations as were the Egyptians, or the inhabitants of the Canary Islands, in the days of old. The principal difference, however, between the men of former times and our continental neighbors is, that the former embalmed their dead in such a manner as to render them nearly imperishable, as our museums can testify, under the impression that the soul remained near the body as long as it retained its terrestrial form; whilst the latter, who are not much troubled with superstition, as every one knows, are content to impart to their dead a temporary immunity from decay."

G. R. Gliddon, Esq., formerly U. S. Consul at Cairo, an able Egyptologist, long a resident in Egypt, having left me for perusal, a MS. of his on Mummies, I have extracted from it the following abridged statements of facts and opinions: "The soil of Egypt is so profoundly drenched by inundation, that from the earliest to the latest times, no cemeteries were constructed on the alluvial plain. The dead were interred upon the sand at a level high above the river's utmost rise, where they rapidly dried. The towns were situated some miles off from the *Necropoles*. The dead were carried to the desert, which in some cases lay ten to fifteen miles off, and which was used as the primitive burial places before the art of mummification was introduced—before pyramids and catacombs were constructed.

"In summer the plague does not occur along the Nile—it is a winter and spring disease that dies invariably in *June*. But the peculiar atmospheric phenomena of Egypt are then, such, that as the heat is greatest so the N. W. or Etesian blows highest. In fact, what with the N. W. wind blowing up the river eight months of the year, and the S. E. blowing four months down, the valley of the Nile is a perfect *air funnel* through which for six months out of the twelve the wind blows a gale upwards or downwards.

"We return to the earliest days of Nilotic ante-monumental history when the primitive wandering shepherd transformed by time and necessity into a stationary farmer, had witnessed the drying effects of the sands of the desert, impregnated with *Natron*, which preserved the dead from putrefaction; he was led to use this and *baking* or *desiccation*, bitumen, bandages, clothes, etc., and to excavate rocks and make tombs for his dead.

"Mummification ceased about A. D. 640. The *Necropoles* of Memphis covers about twenty-two miles from N. to S. and about a mile in breadth from E. W., being the most ancient extant.

"The largest Necropolises of the Nile are to be found on the *Western* side along the Lybian chain of limestone hills, in the neighborhood of the larger cities. Saûdra, the nearest to Memphis, is the largest. From the remote age of *Menes*, (whose reign cannot be brought down later than 3600 B. C., probably 5000 B. C.,) the city of Memphis continued to pour out her dead upon this vast emporium of bodies, down to from 500 to 800 A. D.

"Great inconvenience is experienced, now-a-days, in Egypt, owing to the heat and rapid putrefaction of *corpses* which are in consequence hurried to the grave with a celerity quite appalling to our European ideas. In the plague of 1835, I spoke with a Nubian servant who was apparently in good health about 12, M., and by 2 o'clock his bier passed my house with the lugubrious chant announcing his body's last journey to the dust. Cases such as these are familiar to all in oriental countries. At Cairo I have frequently had occasion to pay the last obsequies to friends whose relations wished the *corpse* to be sent to the Protestant burial ground at Alexandria, to England, and even to America, and with the utmost expedition, and at lavish expense, in copper or leaden coffins, it was scarcely possible to place the corpse into them quickly enough to escape inconveniences: for without *ice* it is impossible.

"The invention of mummification obviated all difficulties: the bodies went instantly to the balancers as soon as the breath had abandoned them; every provincial temple had its complete establishment for converting them into mummies at any expense the family chose, and after about seventy days the corpses were ready to be conveyed any distance to the tombs."

Although the period of seventy days here given agrees with classical history, (Herodotus and others) yet the Pentateuchal history proves that Jacob's body which was embalmed in Egypt, agreeably to the method then in use in that country, required but forty days to "fulfil" the whole term "of those who are embalmed:" "And Joseph commanded his servants, the physicians, to embalm his father: and the physicians embalmed Israel. And *forty days* were fulfilled for him; for so are fulfilled the days of those which are embalmed."—*Gen. L., 2, 3.*

Embalment among the Hebrews at a later era is thus briefly indicated in sacred history: "And there came also Nicodemus (which at the first came to Jesus by night) and brought a mixture of myrrh and aloes, about an hundred pound weight. Then took they the body of Jesus, and wound it in linen clothes with the spices, as the manner of the Jews is to bury."—*St. John xix, 39, 40.*

Mr. Gliddon estimates that the Necropolises of Memphis and Thebes held half of the dead of ancient Egypt below the first cataract, and that in 3,000 years, during which mummification prevailed, the number of mummies amounted to four hundred and fifty or five hundred millions, "all being imperishable save by the hand of *man*."

The average length of mummies, owing partly to the desiccation each body has undergone, which has contracted its true proportions, and partly to the fact that the ancient Egyptians were not a large race of men, may be roughly estimated at five and a half feet, when enveloped in their wrappers. The height of the reclining body and the breadth across the shoulders one and a half feet each.

"Extraordinary as my assertion may seem, the tombs of Egypt excavated in the rock, are numerous enough to hold all these mummies.

"In chronological duration, *mummification* antedates all human history, all monumental records, and following its phases down to the fifth century after our era, a period exceeding five thousand years!"

In a published work, (*Olia Egyptiica*) Mr. Gliddon gives the prices of Egyptian Embalmments: "Three classes of mummies; the first of which costs one thousand two hundred and fifty dollars, the second, three hundred dollars, and the third, or cheapest, twenty dollars; some having one thousand yards of *linen* weighing forty-six pounds, varying in texture from good calico to superfine cambric.

"The Egyptians were under our average size. The length of life in Egypt, even in days long before Abraham, being the same as our own, proved by innumerable sepulchral tablets, the reigns of kings, and the skulls of mummies."

The Pharaonic embalmers and their successors and imitators, down to M. Gannal, stand at an almost infinite distance below the late celebrated Italian, Segato, who possessed the art of fossilizing or petrifying the human body, not excepting its softest tissues, as the viscera, brain, etc.—There is, as reliable travelers assert, a table in the museum of Florence, made in mosaic out of the human organs, solid like marble, the pieces of which were prepared by Segato. He carried his secret with him to the tomb.

The reader is referred to an article in this Journal, translated by Dr. M. M. Dowler from the *Jour. de Méd. de Bordeaux*, (July, 1856) in which will be found Prof. Barbet's account of the method by which M. Lapeyrouse mineralizes animal matters by the earthy chlorides in twenty to thirty hours, so that animal substances will remain unchanged for "an unlimited time." This process, M. Lapeyrouse has patented. His experiments were made before the commission of the Council of Hygiene of Gironde, and should future experience and the test of time confirm all that Prof. Barbet of Bordeaux has said in its favor, the discovery will not only supersede all other methods of embalming the dead and of preparing anatomical subjects for dissection or preservation, but must prove highly advantageous in an industrial and economical point of view, and the more so, because it is not attended with much expense.

The value of this discovery, if discovery it be, cannot be definitely proven, except by the test of time. This test is in favor of the Egyptians as yet, seeing that without having used poisons dangerous to the living, they have preserved the dead for thousands of years. MM. Gannal, Lapeyrouse and others, must perfect their methods by excluding deadly poisons, and by awaiting the lapse of the forty centuries which Napoleon saw perched upon the pyramids, looking down upon the army at the battle of the pyramids!

Baron Larrey, the great surgeon, in his Military Memoirs of the campaigns in Egypt, gives a very interesting account of the Egyptian mode of embalming, yet he claims, nevertheless, for the moderns, the highest degree of success in this behalf, giving at the same time his mode, which consists chiefly in the application of corrosive sublimate, to the fleshy parts, and then the plunging of the whole body in a solution of this dangerous poison for ninety or a hundred days. "Thus," says he, "I preserved the body of Col. Morlan, who fell at the battle of Austerlitz; it is still perfect." But it is poisoned! To prepare, to dissect, or to keep such a subject is not devoid of danger. Should any evil minded person

wish to poison his neighbor, a bit of the gallant colonel might be used. Besides, religion or affection, which gives rise to the embalment of the dead, must abhor the association of the idea of a beloved friend with a deadly poison!

The following paper from the *Charleston Medical Journal* translated from the *Moniteur des Hôpitaux*, presents a brief historical summary of the art of embalming:

We must go back to the earliest ages, in order to find the origin of preserving bodies, but for its history we must confine ourselves to those traditions which have been handed down to us in connection with the discovery of monuments which have escaped the destructive effects of time. Among the nations of Asia and Africa, where embalming appears to have been a general custom, those holding the first position were the Egyptians and the inhabitants of India. The Egyptians particularly, who left such numerous traces of ancient splendor, seemed to have wished to perpetuate themselves even in death, in strewing upon their soil mummies as indestructible as the superb monuments which concealed them.

Historians and antiquarians still conjecture on the motive which led these people to preserve the dead with so much care. Some attribute it to the belief that the soul, after escaping from the body, wandered about during 3,000 years to reënter it, and that, therefore, the destruction of the former would compel it to pass into the body of an animal. The more rational believe the practice to have arisen in connection with the principles of hygiene, one of the branches of medicine that the Egyptians cultivated with so much success. For in these hot regions, only receiving fertility from the overflowing of the Nile, the decomposition of bodies deposited in the earth would soon destroy the purity of the air, and spread among the population the seed of the most virulent disease. It is true that the places destined for burial were above the inundations of the river, but in these elevated places the putrefaction of bodies would have been even more fatal; for the winds which prevail in these countries in bringing putrid miasms from a distance would have transported also their disastrous effects. These considerations were too intimately connected with the interests of the public health to escape the enlightened spirit of those who had it under care; thus, Herodotus relates, that during a period of three thousand years Egypt was one of the healthiest countries in the world. Now, subject to the fatal yoke of Mahometanism, it no longer enjoys this immunity, but it has become the hot-bed of the plague. The various modes of embalming in Egypt might be reduced to the following operations:

- 1st. Remove from the body all fatty matters and mucous portions, by the prolonged action of soda.
- 2d. After having well washed the body, dry it in the air or in a stove.
- 3d. Preserve it by employing bitumen, balsams, resins and salts.
- 4th. Surrounding it with numerous strips of cloth, smeared with gum or bitumen.

The aromatics employed by the rich, were myrrh, aloes, cannella and cassia. For the inferior classes, cedar and the bitumen of Judea.

The duration of embalming varied from forty to seventy days, depending much on the drying of the bodies. When the operation was finished, they were enclosed in sarcophagi, and deposited in sepulchral chambers,

inaccessible to moisture, the temperature being maintained at about 88 degrees, Fahr.

It is under these favorable conditions that a great number of mummies have been preserved through a long series of ages, and now supply us with sufficiently accurate knowledge of the art of embalming among the ancient Egyptians.

The Indian mummies, exhibited at the Garden of Plants, appear to have undergone an analogous preparation to those of Egypt. After embalming, the bodies were sewed up in the skin of goats, and deposited in catacombs.

In examining carefully the tissues of mummies, an analysis will detect nitrate or carbonate of potash, or sometimes sulphate and chloride of soda, or the iodides of lime and magnesia. During the infancy of the art, drying and aromatic substances were alone employed; later, saline matters entered among the ingredients. Ethiopians, inhabiting a country richer in gum than the rest of the globe, were accustomed to enclose their body in a molten mass of this transparent matter, while the Scythians and Persians covered them with an envelope of wax.

Pliny speaks of the antiseptic properties of honey, and it is related that Alexander the Great, after death, was rubbed with honey before burial.

Modern nations following the example of the ancient Egyptians have long practised evisceration in connection with the use of a number of solid and fluid substances to preserve bodies. Alcohol, essential oils, and compound liniments are most conspicuous; balsamic and aromatic powders with saline substances are also used.

In the middle ages the art of embalming consisted in mixing aromatic substances with salt, with which the bodies were filled. Henry I. of England was thus embalmed in 1135: long incisions were made in various parts of the body, filled with this composition, then sewed up, the body being then enveloped in a beef's skin and enclosed in a coffin. The employment of salt for the preservation of the bodies of kings, is well known in history, the sellers of salt claiming as their right to assist at the royal funerals, and bear the bodies of the kings.

In 1658, Louis C. Bils, a noble of Holland, well skilled in anatomy, announced that he had found a way of preserving bodies from putrefaction without evisceration, so that the form and flexibility of the extremities being retained they could be used for dissection. The announcement of this discovery on the part of the first noble who had given up himself to the pursuit of anatomy made a great sensation. At the height of his renown the States of Brabant bought from him five embalmed subjects for 22,000 florins. Zipœus, professor of anatomy at the University of Louvain, to whom they were given, was appointed to receive the secret; but a few weeks had hardly elapsed when the bodies became putrid. Bils, pretending that such a result was owing to the jealousy of the professors who placed his preparations in a damp situation, in order to promote decomposition. Bils' treatment of bodies was with himself eminently successful; the secret was buried with him.

Ruysch, also a Dutch physician and anatomist of celebrity, tried to eclipse his adversary, Bils. He succeeded in injecting pieces, which preserved their softness, flexibility and color. His collection so attracted general attention that it was visited by all the curious of Europe. It is said that Peter the Great during a visit to this museum, was so attracted by

the embalmed body of a little child, which appeared to invite him with a smile, that he kissed it. Ruysch sold his collection, at the entreaties of Peter the Great, for 30,000 florins. Although seventy-nine years old, he immediately recommenced forming a collection, which he succeeded in doing in two years. In dying, in 1731, he also carried off with him the secret of his admirable injections.

Darconville was the first who discovered, in 1762, the preservative properties of corrosive sublimate, but we are indebted to the illustrious Chaussier for the practical use of this drug in preserving animal matter.

Beclard, chief of the anatomical works of the faculty of medicine of Paris, applied the sublimate in embalming bodies. Charged with preserving the body of a young man who died with hectic fever, (the parents refusing to have the body opened,) after making numerous punctures and incisions in every portion of the body, he placed it in a solution of corrosive sublimate, in which it was kept for two months. When taken out, it was dried for a few days, and then enclosed in a glass case, where it remained for a year without smell, or the slightest appearance of alteration. It was then given to the family. The skin was discolored grayish, and the features were somewhat changed from the thinning of the lips, cheeks, eyelids and ears.

Bugliaretti, an Italian physician, united arsenic with sublimate. He injected with this solution the primitive carotid artery, the right jugular vein, the external iliac on both sides, and by using a trocar, he forced the fluid into the thorax and abdomen. The results obtained, appeared to be very similar to the preceding.

Dr. Tranchina, of Naples, acquired a great reputation in Italy for preserving bodies. His method consisted in an injection of a solution composed of 4 lbs. of arsenic in 10 lbs. of water. This mode of preservation, very dangerous for dissectors, did not serve the purpose of embalming, for the body became livid and atrophied in drying, till only a skeleton remained, covered with skin from which the cuticle had peeled.

In 1822, M. Gannal, manufacturer of glue, discovered that a solution of salt and alum would prevent fermentation. With this mixture in connection with a small quantity of arsenite of soda, he injected the body of a child, which was left on the tables of the Morgue for three months, and from which he attained a great reputation.

It is nearly fifty years since chloride of zinc was first used in England for preserving animal matters. Sucquet took out a patent for preserving pieces, by first injecting them with sulphate of soda, and then plunging them in a solution of chloride of zinc.

M. Granger had been previously acquainted with the antiseptic properties of the sulphate of zinc, and a young savant, M. Gratiolet, conservator of comparative anatomy at the Garden of Plants, had tried it for preserving anatomical pieces. After numerous experiments he abandoned this salt, which did not preserve sufficiently, as the tissues became discolored. The skin resembled parchment, and the muscles diminished more than a third of their volume. Although injections of salt tried at the anatomical rooms in Paris were unsuccessful, it is still used by anatomists in preserving subjects.

Dr. Roux, of Nîmes, teaches the following system: It is impossible to find an antiseptic, which will preserve all subjects. The following circumstances should be taken into consideration: 1st. The constitution of

the subject. 2d. The cause of death. 3d. The temperature. Anatomists must have daily observed in the dissecting room, that putrefaction is differently produced : in some subjects it shows itself with extreme rapidity, in others, some days elapse, and a few might be kept for even weeks, without much decomposition. From this fact, he concludes that the choice of an antiseptic agent depends upon the character of the substance which it is intended to preserve—that is to say, upon each subject—should be chemically treated according to the constitution, cause of death, and influence of temperature. After long experience, this anatomist lays down the following rules :

A young animal is best preserved by using a sulphate ; a sulphite for an animal at puberty ; and a chloride for an adult ; and lastly, to prevent mould from appearing on the surfaces pour over them either some essential oil, ether, or chloroform. There is no universal antiseptic agent. By following these rules, astonishing results will be obtained.

*Preservation of Human Bodies.*—No people have succeeded so well as the ancient Egyptians in preserving the bodies of their friends and relatives from decomposition. We have been at the vast Necropolis of Sak-kara, and watched the process of dragging up the mummies from the deep pits in which they had rested for at least three thousand if not four thousand years. The restless Bedouin Arabs have been carrying on the revolting occupation of rifling those deep, capacious vaults in which many hundred bodies were artistically packed, several centuries, for the sake of the jewelry, shoes, caps and specimens of ancient arts that are thus brought to light ; and although the business is still actively pursued, it is hardly probable that there will be any apparent diminution of mummies a thousand years hence.

This not merely demonstrates the denseness of the Nilotic population through a long series of Pharaonic ages, but also the universal custom of embalming all the dead. Indeed, the same care bestowed in the mummification of human beings in Egypt, whether from religious or hygienic views, was also extended to dogs, cats, birds, crocodiles, etc., so that countless millions will not over express the number still remaining in the most perfect state of preservation, a proof of all that might be collected on this curious and interesting subject.

A strong desire was evinced both in France and England, to prevent the decay of their early sovereigns, but their efforts, based upon no scientific principles, were very imperfect, so that it was quite rare to find a well-preserved body in any of the royal vaults in Europe. Generally they are in deep, damp places, under floors, or beneath low, massive arches, where no rays of sunlight ever appear, to dissipate the sweating moisture that corrupts whatever is placed within the gloomy resting-places of kings and potentates.

The royal vaults in which the whole line of electors, emperors, empresses and the families of the rulers of the Austrian empire are placed for the sleep of death, are dry, tolerably light and admirably ventilated.—What the condition of the bodies may be in their costly sarcophagic and metallic coffins is of course unknown, as no mention is extant of any explorations for ascertaining.

The sarcophagus in which the august remains of Maria Theresa were laid—which was constructed under her own eyes, at an enormous cost, is a massive metallic structure occupying as much space on the floor as a



large-sized bedstead. It is about five feet high, having magnificent metallic statuary at the corners, with curiously draped and winged figures as accompaniments. The Duke of Reichstadt, the son of Napoleon le Grand, is in a plain, unadorned metallic coffin, resting on a stool at the side of the wall. It has a dull metallic appearance, like tarnished iron. Possibly it may be zinc.

The Empress Louisa Maria, the second wife of Napoleon, the mother of Reichstadt, who died reigning Duchess of Parma, is in a similar looking coffin, placed in a like position a few feet from her son.

But of all the modern final reposing places of royalty we have personally examined, those of the Sultans of Turkey are the most gorgeous and extraordinary in all respects. It would require a more severe examination of packed-away manuscripts, written over the mouldering remains of those ferocious monsters,—from Mahomet the Second to Mahomoud the Second, the father of the present Pedisha, Abdel Mejid, than we care to undertake, for particulars, and thus we close these hasty observations by showing the condition of some of the kings of England during eventful historical periods.

The English evidently desired to so protect the bodies of their early and later kings that they should resist the chemical tendency to decomposition. They partially succeeded in a few instances, only, as will be noticed in the following collection of facts.

King Edward I. died in July, 1307, and notwithstanding his injunctions, was buried in Westminster Abbey in October of the same year. It is recorded that he was embalmed, and orders for renewing the cere-cloth about his body were issued in the reigns of Edward III. and Henry IV. The tomb of this Monarch was opened, and his body examined in January, 1774, under the direction of Sir Joseph Ayloffe, after it had been buried four hundred and sixty-seven years. The following account is extracted from a contemporaneous volume of the Gentleman's Magazine :

"Some gentlemen of the Society of Antiquarians, being desirous to see how far the actual state of Edward First's body answered to the methods taken to preserve it, obtained leave to open the large stone sarcophagus, in which it is known to have been deposited, on the north side of Edward the Confessor's chapel. This was accordingly done on the morning of January 2, 1774, when in a coffin of yellow stone they found the royal body in perfect preservation, inclosed in two wrappers; one of them was of gold tissue, strongly waxed, and fresh, the other and outermost considerably decayed. The corpse was habited in a rich mantle of purple, paned with white, and adorned with ornaments of gilt metal, studded with red and blue stones and pearls. Two similar ornaments lay on the hands. The mantle was fastened on the right shoulder by a magnificent *fibula* of the same metal, with the same stones and pearls. His face had over it a silken covering, so fine, and so closely fitted to it, as to preserve the features entire. Round his temples was a gilt cornet of fleurs de lys. In his hands, which were also entire, were two sceptres of gilt metal; that in the right surmounted by a cross fleur, that in the left by three clusters of oak leaves, and a dove on a globe; this sceptre was about five feet long. The feet were enveloped in the mantle and other coverings, but sound, and the toes distinct. The whole length of the corpse was five feet two inches."

Edward I. died at Burgh-upon-Sands, in Cumbeland, on his way to Scotland, July 7, 1307, in the sixty-eighth year of his age.

Another instance of partial preservation, is that of the body of King Charles I., who was beheaded by his subjects in 1649. The remains of this unfortunate monarch are known to have been carried to Windsor, and there interred by his friends without pomp, in a hasty and private manner. It is stated in Clarendon's History of the Rebellion, that when his son, Charles II., was desirous to remove and re-inter his corpse at Westminster Abbey, it could not by any search be found. In constructing a mausoleum at Windsor in 1813, under the direction of George IV., then Prince Regent, an accident led to the discovery of this royal body. The workmen, in forming a subterraneous passage under the choir of St. George's Chapel, accidentally made an aperture in the wall of the vault of King Henry VIII. On looking through this opening it was found to contain three coffins, instead of two, as had been supposed. Two of these were ascertained to be the coffins of Henry VIII. and of his queen, Jane Seymour. The other was formally examined, after permission obtained, by Sir Henry Halford, in presence of several members of the royal family, and other persons of distinction. The account since published by Sir Henry, corroborates the one which had been given by Mr. Herbert, a groom of King Charles's bedchamber, and is published in Wood's *Athenæ Oxoniensis*.

"On removing the pall," (says the account,) "a plain leaden coffin presented itself to view, with no appearance of ever having been inclosed in wood, and bearing an inscription, 'King Charles, 1648,' in large, legible characters, on a scroll of lead encircling it. A square opening was then made in the upper part of the lid, of such dimensions as to admit a clear insight into its contents. These were, an internal wooden coffin, very much decayed, and the body carefully wrapped up in cere-cloth, into the folds of which a quantity of unctuous matter, mixed with resin, as it seemed, had been melted, so as to exclude, as effectually as possible, the external air. The coffin was completely full, and, from the tenacity of the cere-cloth, great difficulty was experienced in detaching it successfully from the parts which it enveloped. Wherever the unctuous matter had insinuated itself, the separation of the cere-cloth was easy; and where it came off, a correct impression of the features to which it had been applied, was observed. At length the whole face was disengaged from its covering. The complexion of the skin of it was dark and discolored. The forehead and temples had lost little or nothing of their muscular substance; the cartilage of the nose was gone; but the left eye, in the first moment of exposure, was open and full, though it vanished almost immediately; and the pointed beard, so characteristic of the period of the reign of King Charles, was perfect. The shape of the face was a long oval; many of the teeth remained; and the left ear, in consequence of the interposition of the unctuous matter between it and the cere-cloth, was found entire.

"It was difficult, at this moment, to withhold a declaration that, notwithstanding its disfigurement, the countenance did bear a strong resemblance to the coins, the busts, and especially to the picture of King Charles the First, by Vandyke, by which it had been made familiar to us. It is true that the minds of the spectators of this interesting sight were well prepared to receive this impression; but it is also certain that such a facility of belief had been occasioned by the simplicity and truth of Herbert's narrative, every part of which had been confirmed by the investi-

gation, so far as it had advanced; and it will not be denied that the shape of the face, the forehead, the eyes, and the beard, are the most important features by which resemblance is determined.

"When the head had been entirely disengaged from the attachments which confined it, it was found to be loose, and without any difficulty was taken out and held up to view. The back part of the scalp was entirely perfect, and had a remarkably fresh appearance; the pores of the skin being most distinct, and the tendons and ligaments of the neck were of considerable substance and firmness. The hair was thick at the back part of the head, and in appearance nearly black. A portion of it, which has since been cleaned and dried, is of a beautiful dark brown color. That of the beard was a redder brown. On the back part of the head it was not more than an inch in length, and had probably been cut so short for the convenience of the executioner, or perhaps by the piety of friends soon after death, in order to furnish memorials of the unhappy king.

"On holding up the head, to examine the place of a separation from the body, the muscles of the neck had evidently retracted themselves considerably; and the fourth cervical vertebra was found to be cut through its substance transversely, leaving the surfaces of the divided portions perfectly smooth and even, an appearance which could have been produced only by a heavy blow, inflicted with a very sharp instrument, and which furnished the last proof wanting to identify King Charles the First."

The foregoing are two of the most successful instances of posthumous preservation. The care taken in regard to some other distinguished personages has been less fortunate in its result. The coffin of Henry VIII. was inspected at the same time with that of Charles, and was found to contain nothing but the mere skeleton of that king. Some portions of beard remained on the chin, but there was nothing to discriminate the personage contained in it.

During the present century, the sarcophagus of King John has also been examined. It contained little else than a disorganized mass of earth. The principal substances found, were some half decayed bones, a few vestiges of cloth and leather, and a long, rusty piece of iron, apparently the remains of the sword-blade of that monarch.—*The Medical World*.

*Revival of Urn-Burial:* By the Editor of the Edinburgh Medical Journal.—A curious discussion has been raised by the Académie of Médecine of Paris, on the mode of disposing of the dead. Several of the leading Paris journals, particularly the "Presse" and the "Siècle," defend with great boldness the assertion of the Académie, that the vicinity of Père la Chaise and the cemetery of Montmartre is gradually introducing new diseases amongst the working classes; and that in summer time, the hospitals are crowded with the victims of pestilence engendered by the fowl air of the graveyards in the neighborhoods of Paris. The discussion is likely to lead to some result and to become a party question; for a new journal, to be devoted entirely to this one question, has just appeared. This journal, called "La Crémation," is edited by two of the first writers of the "Presse," and is supposed to be quite in accordance with the sentiments of the government. M. Alexandre Bonneau proposes to replace all cemeteries adjoining to all great cities by an edifice to be denominated a "sarcophagus." This edifice to occupy the highest

spot of ground in the city, "where the corpses of both rich and poor should be conveyed, there to be laid out on a metallic tablet, which, sliding by an instantaneous movement into a concealed furnace, would cause the whole body to be consumed in the space of a few minutes." With true French instinct, M. Bonneau proceeds to urge not only the utility to the public, but also the interests of art in this new method of disposing of the dead, for he points out with great complacency the new element of prosperity to the artists existing in the furnishing of funeral urns, which he declares would soon open a new source of expense and luxury to the rich. "For who would not love to preserve the ashes of his ancestor? The funeral urn would soon be found to replace on our consoles and mantel-pieces, the present ornaments of bronze clock and china vases now found there." All this may seem a misplaced pleasantry to English minds; but in Paris, these things find serious men to write and fight in their defence; and we cannot help feeling rather startled on reading the sanitary report which first led to their discussion. "The vicinity of the cemeteries is a constant source of mortality. No matter from what quarter the wind blows, it must bring over Paris the putrid emanations of Père la Chaise, of Montmartre, or Montparnasse; and the very water which we drink, being impregnated with the same poisonous matter, we become the prey of new and frightful diseases of the throat and lungs, to which thousands of both sexes fall victims in the spring and autumn of every year. Thus the *angine couenneuse*, which baffles the skill of all our most experienced medical men, and which carries off its victims in a few hours, is traced to the absorption of the vitiated air into the windpipe, and has been observed to rage with the greatest violence in those quarters situate on the outskirts of the town, and, consequently, the nearest to the cemeteries."

The latter argument has created many converts to the opinions of M. Alexander Bonneau; and the first number of "*La Crémation*" has excited much interest. After a long interval of desecitude, Sir Thomas Brown's "*Urn-burial*" may come to be consulted as a work for practical details—and the urns in our museums, instead of representing obsolete utensils, may become models for those vases which present such charms for M. Bonneau. Perhaps, however, the vase theory is a step too far in advance, and the Parisians, if they see their way to consumption by fire, may prefer burying the ashes of their friends in the earth, as was done with the remains of Shelley's burned body, rather than that the dust of humanity, however rich the enclosing caskets, should be chimney ornaments in drawing-rooms.

The utilitarian character of the English, as distinguished from the more fanciful temperament of the French, is exemplified in the mode of interment adopted in the case of the late Sir William Temple, as detailed in the "*Times*" some days ago. The body was interred in a bed of charcoal, whilst the gases from the coffin are conducted by a pipe to the outside of the church. The leading journal speaks in high terms of the conserving influence thus exercised on the lungs of worshippers; but we are not so sanguine as to the benefits of the system. It may do in rare instances of intra-mural burial, but if universally adopted, congregations would be saved at the expense of the general public. Cremation is a process to which the British mind will not soon be reconciled, and the only graveyard reform presently within reach is distant cemeteries and

deep sepulture amongst charcoal or other deodorizing substances.—*Abs. Med. Sci. No. 24.*

Dr. Londe, member of the French Academy of Medicine, has contributed to the *Revue de Thérap Méd. Chirurg.*, (Nov. and Dec., 1856,) several papers of interest upon the cemeteries of Paris in relation to the modes of interment, exhumations, hygienic influences, etc. Emanations from putrefying animal bodies, he avers, cause, when concentrated, vertigo, *malaise*, nausea, loss of appetite, fainting, asphyxia, and death. Hence, he argues against the former practice of burying saints and others under the alters of the churches—a practice, which, in 1744, a Huguenot professor of Montpellier was bold enough to oppose as not only inconvenient but dangerous to health.

In 1776 the government of France restricted the privilege of burial in the churches to a few of the higher orders of the clergy. In 1804 this practice was wholly interdicted, not only as to the churches but in regard to the densely inhabited or central districts of cities.

Interment in towns, in churchyards, within the walls and under the altars of churches, is attributable to christians rather than pagans. This pernicious practice, which originated in the fourth century of our æra, was directly at variance with the more salubrious method of disposing of the dead in ancient Greece and Rome, namely, cremation or burning, together with the interment of the ashes and burnt bones without the cities. The burning of the dead among the ancient Greeks was an almost invariable practice; even their monumental cenotaphs did not contain dead bodies at all. Among the Romans all the dead were not burned. Many were interred in the ground but always beyond the limits of the cities. The early christians, who were opposed to cremation, and who at first adopted the Hebrew method of burying in the earth, sometimes in vast excavations or caves, viewing the body as resting only for a time in the grave, in anticipation of “the resurrection and the life,” from the best motives deposited their dead in the vicinity of churches, and finally in the churches themselves. This honor was, however, restricted to personages illustrious for their piety or position. The genius of philanthropy guided by lights of science is now directed towards the correction of this insalubrious practice, and its total abandonment may be expected at no very remote period.

Of a Parisian cemetery, *Père la Chaise*, the author of “the American in Paris” (1839) says: “thirty years ago it had only fourteen tombs.” Carter, in his letters, says “that this cemetery, made by Napoleon, was opened for the first burial, May 21, 1814, and that by the year 1825, it had received one hundred thousand dead. It contains seventy acres, being three miles from the centre of the city, upon the declivity of Mount St. Louis, having rocks, hills, vales, shade,” etc.

The first named work gives a summary of the regulations for the inhumation of the dead in towns and cities: “All cemeteries are required to be located beyond or without the towns, avoiding low, wet, confined situations. The dead bodies are to be covered with at least four feet of earth, with four feet interval between each, and two feet at the head and foot, about fifty-two square feet for each corpse. The graves are disposed of in perpetuity, or in temporary sessions of six years; the former at twenty-five dollars per metre of three feet, two metres being required for a grave, and the latter at ten dollars; these being disposable anew at the

end of the term, the first purchaser having the refusal. All the funerals are in the hands of a company, who have their office, keep a register of the dead, attend all wants, carriages, grave-diggers, weepers, etc. They have a fixed price for the rich, which enables them to bury the poor for nothing."

Dr. Londe says, that although the bodies are destroyed in two years, the grants, for greater security, in this behalf, now extend to the end of the fifth year. He says that in the cemetery Montparnasse, one hundred and twenty-two thousand have been interred within the last twenty years. In fifty years it will have received five hundred thousand dead bodies.

Interment in the *fosses* (graves) is the most usual mode in Paris. Bodies buried in vaults (*caveaux*) sometimes become desiccated or mummified, in positions favorable to the drying process. Examples of this kind of mummification have sometimes, though rarely, occurred in the vaults in New Orleans. In the Catholic cemetery, No. 2, as the sexton informed the writer in 1840, there had been a vault opened in the upper tier, where was found the body of a man which had been long entombed, and which had never undergone putrefaction. It was dry, but otherwise little changed; the eyes, though desiccated, remained; the hair and whiskers, firmly set; the color of the skin, natural.

In dilapidated tombs, when the coffins had been placed on or near the ground, I found that the bones not yet wholly decomposed, might be crushed into a coarse powder by grasping them in the hand. The bones of a Frenchman aged 49, buried in 1809, and those of a man aged 22, buried in 1815, crumbled into dust from very slight pressure; of their coffins not a vestige remained.

In the vaults of the New Orleans cemeteries, a body buried in the summer is generally decomposed in three months; if buried in the winter, six months may be often required to separate the bones, and dissipate the offensive gases. At all seasons, when the weather is warm, foetid emanations are apt to abound. Owing to heat and humidity, mahogany coffins seldom last two years; those of cypress have been found perfectly sound after thirteen years.

The Delta of the Mississippi, rivals that of the Nile in whatsoever may be inconvenient and insalubrious in connection with inhumation. If cremation should ever become customary, it will be more suitable for New Orleans than for most cities. Whether New Orleans is, or is not the best place to live in, is an open question, but there can be little doubt that it is one of the worst places for such as desire a cheap, dry, convenient, and comfortable grave.

The greatest anniversary in New Orleans is that of the First of November—All Saints' Day—when the city pours its living masses into the Catholic cemeteries, either as mourners for the dead or spectators of the gorgeous decorations of the tombs—a social feature highly characteristic of this as compared with any other city of the Republic. At this season, which is usually dry and comparatively cool, the decomposition of the dead is considerably retarded, and the offensive emanations are no longer insupportable. Yet at all seasons, offensive gases escape and spread through the air, as the dead are interred not *in but above* the ground. The defective construction of the tombs and vaults, the perviousness, porosity, elevation and fissures, and even falling of the brick walls, in which sometimes wood is used, the bad quality or temporary duration of the

mortar, the humidity of the soil, and the heat of the sun, all combine to favor the escape of foetid gases, which are at least repulsive, even should they not be so deleterious to the health of the city, as some writers have supposed. At all seasons, and at unexpected hours, mourners will sometimes visit and continue long at these tombs, pouring out the saddest lamentations, as I have witnessed, myself unperceived, while making statistical researches into monumental histories of the dead.

Without dwelling upon the sanitary influences of the New Orleans cemeteries, it may be remarked that their moral aspect is, perhaps, conformable to the French type, as set forth by a celebrated authoress of England, whose mortal tableau of the cemetery of *Père la Chaise* will close this panorama of the tomb :

"Many groups in deep mourning were wandering among the tombs ; so many, indeed, that when he turned aside from one, with the reverence one always feels disposed to pay to sorrow, we were sure to encounter another. This manner of lamenting in public seems so strange to us ! How would it be for a shy English mother, who sobs inwardly and hides the aching sorrow in her heart's core—how would she bear to bargain at the public gate for a pretty garland, then enter amid an idle throng, with the toy hanging on her finger, and, before the eyes of all who chose to look, suspend it over the grave of her lost child ? An English woman surely must lose her reason either before or after such an act ; if it were not the effect of madness, it would be the cause of it. Yet such is the effect of habit, or rather of the different tone of manners and of mind here, that one may daily and hourly see parents, most devoted to children during their lives, and most heartbroken when divided from them by death, perform with streaming eyes these public lamentations. It nevertheless is impossible, let the manner of it differ from our own as much as it may, to look at the freshly trimmed flowers, the garlands and all the pretty tokens of tender care which meet the eye in every part of this wide-spread mass of moral nothingness, without feeling that real love and real sorrow have been at work.

"One small enclosure attracted my attention as at once the most *bizarre* and the most touching of all. It held the little grassy tomb of a young child, planted round with choice flowers, and crucifix and other religious emblems, several common play-things, which had doubtless been the latest joy of the lost darling. His age was stated to have been three years, and he was mourned as the first and only child after twelve years of marriage. Below this melancholy statement was inscribed—

*Passants ! priez pour sa malheureuse mere !*

(Travellers ! pray for his unhappy mother !)

Might we not say that

Thought and affection, passion, death itself,

They turn to favor and to prettiness ?"

*Paris and the Parisians*, 115.

[*N. O. Med. & Surg. Journal*.

## EDITORIAL AND MISCELLANEOUS.

## ATLANTA MEDICAL COLLEGE.

WE would desire to inform those who feel an interest in the success of this Institution, that, notwithstanding the extraordinary efforts, which were made in several quarters, previous to the commencement of the present Session, to prejudice the public mind unfavorably, in reference to the time selected for the Course of Lectures, we are enabled to report a *decided* progress in *every* particular.

In the number of the Class there has been a very considerable increase, most remarkable, when taken into connection with the uncertainty which prevailed as to the ability of the Faculty to accomplish, unaided, the task of erecting suitable buildings, and furnishing the other necessary appliances for a first class College; and especially when taken into connection with the energetic labors of rival institutions to pull us down.

So long as the patronage of *certain* Southern Schools was not interfered with by the establishment of a new institution, at a point where it was found to be perfectly practicable to give a full, thorough, and last, though not least, a *successful* Course of Medical Lectures in the *summer*, no word of complaint is heard—judging by their own localities, on the banks of tadpole rivers, or in the vicinity of swampy rice fields, subject to the visitation of those deadly pestilences, Cholera and Yellow Fever, and besides, imagining that “they were the people, and wisdom would die with them”—that anywhere ‘else than certain would-be great cities, was “no where”—they had no fear of the success of any such movement in the South; but by degrees, becoming aroused to the knowledge of the fact that there was *one* locality, South of Mason and Dixon’s Line, which furnished the facilities for successful *Summer* teaching, and that the effort to use it as such, was no longer an experiment, it was apparently resolved by one or two of the “regulators” of medical affairs, that this shall not be—medicine shall not be taught in the *South* in the *Summer*,—indeed there are only certain points where it ought to be taught at all; we have those points, *therefore*, we ought to do and will do all the medical teaching, if we can. It remains to be seen whether this logic will find a response of approval, either from “Americanism” or “Democracy” in medical ranks. Of one thing, certain puffed up gentlemen may be assured, the masses of the profession will never countenance an “Aristocracy” in Medicine, even though it may be of the codfish order.



In this connection, it affords us *pleasure* to acknowledge the friendly demonstrations of most of the Colleges, North and South, with whom we have had any intercourse, and it affords us *special pleasure*, to acknowledge the many obligations conferred upon us, by individual members of the profession, scattered all over the land, who have come up to our help in so many ways, and to whom we owe a debt of gratitude that will at least be held in remembrance, if never discharged.

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#### SOCIETY OF ALUMNI OF THE ATLANTA MEDICAL COLLEGE.

— We hope it will be recollected by the graduates of this school that at the close of the last session a "*Society of Alumni*" was organized and a speaker appointed to address them at the close of the present Session upon the occasion of their Anniversary Meeting, which will take place on the *night* of the 3d of September, that being the *day* upon which the degrees will be conferred, and the Valedictory address delivered to the Graduating Class, in the Atlanta Medical College. The anniversary address to the Society of Alumni will be delivered by N. F. Powers, M. D. of Thomson, Ga., who will doubtless make it an occasion of interest to all who attend, and we cannot too strongly urge upon the *alumni* of the Institution the importance of meeting their brethren upon that occasion. We hope to see a large number of those who have thus become identified with the welfare of this college present at the commencement, not only for the purpose of renewing the friendship of former days, but that we may be able to show them that we have not been idle or resting upon the achievements of our first years, but that our motto has been *onward*; until now, we do not shrink from a comparison of our facilities for medical teaching with those of any institution in the land.

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#### THE AMERICAN MEDICAL ASSOCIATION AND MEDICAL EDUCATION.

SOME of our editorial friends seem to be very much "*exercised*" on account of the introduction of certain resolutions in reference to medical education, into the American Medical Association, by our friend and colleague, Dr. J. Boring. Now, while we do not know the man in this broad land who is more competent to defend any position he may choose to take than the gentleman alluded to, and therefore requires no assistance from us, yet we feel inclined to make a few remarks upon this subject.

The truth is, it requires no labored argument to show that the resolu-

tions referred to, embody the *facts* as to the *powers*, and what should be the *objects* of the association, and what are indeed understood to be the great ends to be accomplished by all medical organizations, and in addition to this, these resolutions exhibit in the most faithful manner, the *facts* as to the result of the effort, upon the part of that body, to regulate medical education, and seek to suggest the course in reference to this "vexed question" which would be most likely to result in the accomplishment of the great ends *stated*, as coming legitimately within its powers.

In reference to the first point, we would enquire where the association derived the "*power to control*" medical education, and if it has such a prerogative, why has it not been exercised? The truth is, no such power exists, and in the very nature of things it is *impossible* that it could. We are not ignorant of the fact that one of the objects of the establishment of the association was the elevation of the standard of medical education; the gentleman who introduced the resolutions embodying "the truth, the whole truth, and nothing but the truth" upon this subject, was not ignorant of this, as he is not likely to be lacking in knowledge of any fact that may have the most remote connection with any subject which he touches, but we presume that he was equally well acquainted with the *notorious* fact that the association had been found to be utterly impotent to the accomplishment of this end, not possessing, as is acknowledged upon all hands, any *legislative power* over the profession at large, and not possessing the "*moral power*" to induce compliance with its *recommendations*, from the equally notorious fact, that the Association does not and cannot embody the *sentiments* and *will* of the Medical profession of the United States, from a number of causes, among which we may designate its *origin*, not springing from the profession, but a few self constituted (virtually) guardians of the interests of the profession, a majority of whom were doubtless actuated by high and commendable motives, but utterly incompetent to the task of regulating medical affairs in this country, because *those to be controlled were not represented*, and we hesitate not to say, without the fear of successful contradiction, that this Association has continued, up to the present day, radically defective in the essential principles which belong to *legislation* in a free and enlightened government, and with the same confidence we assert that it has been equally defective in those elements which are indispensably necessary to arm it with the *moral power* required for the *control* of the profession, or even reform in any *radical* particular, no powers having been delegated to it and the profession generally, never having been represented in it, or recognized the small portion constituting it, as the *rightful* exponent of the medical sentiment or will of this vast country.

It is to be distinctly understood at the same time, that we contend honestly for what we *know* to be the *truth* in this matter, that we believe this organization has accomplished a great deal for the science of medicine and for the elevation of the profession in many ways, and we would give most cheerfully our feeble aid to cherish and sustain it as an instrument for good, which it can only be, by keeping within the sphere of practicable things.

But of all the positions in reference to this subject, that which strikes us as the most singular, is the one which suggests the securing of charters for medical colleges from the Congress of the United States; surely the author of such a proposition must have forgotten that there were such things as *sovereign* and *independent* States in this Union, not only competent to control their own internal affairs, but possessing a *supreme* control, except so far as they have seen fit to *surrender* certain rights, and to *permit* national legislation upon certain matters, for the general good. We do not mean to be misunderstood; we are no advocates for the doctrine, "that State Legislatures can create members of the medical profession," such as ought at least to be recognized, by those who are devoted to the advancement of medical *science*, and yet we know, and every body knows, that no *power* in a political sense to legislate upon and to regulate medical matters resides any where else than in the *State Governments*: this fact is too palpable to admit of being made plainer, notwithstanding all the rant and stuff in certain quarters about "medical freemen," &c., &c., coming as it does most strangely from those who would concentrate all power in the Federal Government. No sir, if you have been ignorant of the fact heretofore, learn that there are "State rights" in medicine as well as in other matters, and that the "medical freemen" of this country will never yield the *right* of regulating their own affairs, by their own *State medical organizations*, as they will never yield these same *rights*, in a political sense, to a national government.

So far as the proposition, to establish a uniform system of medical education is concerned, we do not hesitate to admit that it would be best, if it were practicable, to make it the result of the *deliberation*, the *will* and the *wants* of the medical profession of the United States, that it is impossible to obtain this in so vast and diversified a country as ours is too plain to admit of question, and, under existing circumstances, will only be attempted by visionaries or for the advancement of selfish ends. As we have remarked upon a former occasion, we are ready to go into the advocacy of any practical, feasible and commonsense extension of facilities for teaching or requisitions for the doctorate, but do not believe that any radical change in the present plan will be sustained either by the profession or those desiring to enter it, or that more uniformity of

action upon the part of the colleges would be secured by any other which might be adopted. The true friends of the association and those who do not wish to lose its labor for good will let this subject rest or will at least attempt no compulsory measures, even though it be admitted that "those composing the body have the right to choose their associates," while those whose motto is "rule or ruin" will continue to agitate, and, should their counsels prevail, will soon see the end of which, we fear, they have already seen the beginning.

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### CRIMINAL ABORTION OR FETICIDE.

WE are glad to see that the attention of the profession is becoming fixed upon this subject, and we hope that it will not be allowed to rest until it is placed in its proper position in the scale of crime.

The laws upon this subject throughout, we believe, the entire world, show an utter ignorance or disregard of one of the most positive facts in Physiology, the effect of which has been to corrupt and degrade our species, and to destroy an almost incalculable amount of human health.

The product of conception should be looked upon as a living being, and its wanton destruction should be held as *murder*, whether it be with a view of concealing the evidence of a departure from virtue, or resorted to by the married for the purpose of getting rid of the cost or trouble of families.

While we have not had in the South the systematic pursuit of the infamous traffic alluded to, in an article in this number of our Journal, taken from the New Hampshire Journal of Medicine, yet even here, it is an evil of sufficient magnitude to demand the attention of all those who regard the welfare of the race.

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### A BATCH OF INTERESTING QUESTIONS.

WE find in the New Orleans Medical News and Hospital Gazette—

"AN INTERESTING QUESTION :"—Is it a fact that the Massachusetts Medical College will graduate "persons whom they know will practice Homeopathy?" And by the by, does the Massachusetts Medical Society ever expel members who edit quack Journals?" To which we would add—Is it true that there is a medical college in the United States calling itself respectable, that has been guilty of sending out its tickets (or an equivalent,) to be sold in the market for what they will bring?

## PREPARATORY MEDICAL SCHOOL.


OUR attention has been directed to the Circular of Drs. Capers and Taliaferro of this city, who propose to establish a Preparatory Medical School in Atlanta.

As they remark, "Students generally enter College, unprepared to appreciate the opportunities offered for a complete medical education." This is indeed the crying evil connected with medical education. With proper preliminary education, before entering upon the study of the profession, and then a thorough training in a Preparatory Medical School, and a *faithful* adherence afterwards upon the part of the Colleges to the present three years study and two Courses of Lectures, we should have about all that is practicable in the present new and unsettled state of our country; this much, we think, can be accomplished, with earnest and *united* efforts for this *object*; but not even this will be attained, under the lead of visionaries and enthusiasts, or those who are keeping up an excitement upon this subject for selfish purposes.

Drs. Capers and Taliaferro propose giving instruction accompanied with daily recitations upon all the various branches usually taught in Medical Schools, for a term of five months, from 1st of November to 1st of April, including private instruction during the ensuing Session, in the Atlanta Medical College, making a term of nine months, for \$50.

We can commend with the most entire sincerity and confidence, these gentlemen, as fully competent to the task which they propose, and earnestly desire to see their enterprise successful. With such a course of instruction as they propose, we are sure it would be worth more than thrice the time spent in the office of a private practitioner, in what is called "office study" which we all know, as a general rule, is a mere farce. As we learn from the Circular, the School has been provided with every facility for accomplishing the object of its establishment.

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 The Editor of the American Medical Gazette, the able veteran of the American Medical Press, D. Meredith Reese, M. D., not connected with any Medical School, and presumed of course, to be an impartial observer, says, "The Atlanta Medical College has opened its Summer course of lectures with an increased class, and with so able, harmonious and enterprising a faculty, is sure of success."

"The opposition they have encountered from rival schools has only quickened their energies and hastened their prosperity. Prof. Means, and Professor Boring, made the speeches of the session at the late Nashville Convention and secured many friends. Professor Westmoreland's

correspondence with his Journal from Paris, is the best we have seen."

[The publication of the above is made without the knowledge of either of the gentlemen mentioned, and as we do not consider it as involving any individual laudation of ourselves, we have no hesitation in assuming the responsibility, considering it fully justified from that opposition to which allusion is made.—SR. ED.]

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### TO OUR PATRONS.

With this number will close the second volume of our Journal and the connection of the Faculty of the Atlanta Medical College with it as publishers, the Journal having been transferred to G. P. Eddy & Co.

We shall however continue to feel an undiminished interest in the success of the Journal, and as *Editors* will continue to make every exertion not only to sustain, but to advance its standing. All communications referring to the third volume must be addressed to G. P. Eddy & Co., publishers of Atlanta Medical Journal. Those having reference to the previous volumes, to J. G. Westmoreland, to whom all dues on account of these must be paid; subscriptions to the third volume, being paid of course to the new publishers, for whom we earnestly ask the interest of our friends to increase the subscription list.

We are requested to say that it is very important that the published terms—payment in advance—should be rigidly observed.

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### COMMENCEMENT AND VALEDICTORY.

The Commencement Exercises in the Atlanta Medical College will take place on Thursday the 3d of September, upon which occasion the Valedictory Address to the graduating class will be delivered by Thomas S. Powell, M. D., of Sparta, Georgia.

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### UNIVERSITY OF LOUISVILLE---MEDICAL DEPARTMENT.

As will be perceived, the medical department of the University of Louisville will be in operation as usual on the 1st of November next.—The College edifice will be completed and furnished in superior style by the 1st of October.

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### JEFFERSON MEDICAL COLLEGE.

At a meeting of the Board of Trustees held on the 6th inst., Dr. Thos.

D. Mitchell of Philadelphia was elected to the chair of *Materia Medica*, and *Therapeutics*, made vacant by the resignation of Dr. R. M. Huston.

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*Dr. Fell's Cure for Cancer.*—Dr. Fell was some time since admitted into the *Middlesex Hospital* for the purpose of experimenting upon patients with Cancer, with a secret remedy, with which he has been in possession some 15 years. He was admitted into the Hospital, upon the agreement that he should make known to the Surgical Staff the nature of the remedies used by him, and that within six months, he should publish to the world his treatment. The *Boston Medical and Surgical Journal* says: "It is but justice to Dr. Fell to say that the *surgical staff* of the *Middlesex Hospital*, in a report upon the result of his treatment, made March 18th 1857, speak favorably of his method." "They say that Dr. Fell's treatment is safe and easy of application; that it is confined to the enucleation of the tumor merely."

Dr. Fell has published a treatise upon Cancer and its treatment, in which his secret remedies are given; the principle ingredient being, *Sanguinaria Canadensis*, which he supposes has a specific effect upon Cancers. Not only upon the tumor itself, but in eradicating the Constitutional diathesis. He combines with the *Canadensis*, chloride of zinc; One part of the former to two of the latter. The blood root is given at the same time internally in combination with the iodide of arsenic, *Cicuta* or *Taraxicum*.

*National Hotel disease.*—At a regular meeting of the New York academy of medicine at which Dr. Mott presided, Dr. James Wyne of Baltimore read a paper upon the National Hotel disease. Upon examination of the Hygeinic condition of the house, he says: an opening was found in the south-west corner of the cellar, through which a strong current of fetid gas was escaping from the sewer. Both the Committee appointed to investigate the causes of the complaint, and Medical gentlemen in attendance at the Hotel, concurred in the belief that the evil was due to noxious exhalations from this source. Reported to the *New York Journal of Medicine*

A Dr. Cogswell "Down East" has been advertising Extensively in the newspapers, particularly in *Massachusetts*, an *Antiphlogistic Salt*, which its discoverer says, will cure nearly "all the ills that flesh is heir to;" and near half a hundred editors, have borne their testimony in the

most unequivocal manner, to its having cured, under their observation, nearly as many different kinds of disease — *Peninsular Journal of Medicine*.

*Iodine in Neuralgia*.—W. G. Thornton, M. D., of Texas, reports a Case (in the New Orleans Medical News and Hospital Gazette,) of Neuralgia of the head, successfully treated by the application of the Tincture of Iodine. "After the failure of the ordinary remedies," he says, "I applied it, and its effects were almost immediate. I had not finished its application before the pain began to diminish, and soon ceased entirely, and has not since returned."

This application he followed by the internal use of Syrup of Sarsaparilla and Iodide of Potassium.

*Dr. James McClintock*.—At a recent meeting of the Board of Guardians, Dr. James McClintock was elected Chief Resident Physician, to the Philadelphia Hospital, Blockly, which appointment caused the resignation of the whole medical corps, with one exception, viz., Dr. A. H. Graham. The Medical and Surgical Reporter says, "In the election of McClintock, the Board has descended into the dirty mire and filth of politics, jeopardizing the interest of an important, medical charity, by offering a deliberate insult, to the respectable medical practitioners, not only of Philadelphia but of the whole country."

*Veratrum Viride*.—Prof. McGugin in an article in the Iowa Medical Journal, after some considerable experience with veratrum viride, thus speaks of it: "My opinion is, that although it is a remedy which must be exhibited with care, judgment and circumspection, yet it may prove to be as certain in its own peculiar efficacy and powers as quinine, upon the powers of which, we rely with confidence, as opium in its capacity of procuring sleep, or as chloroform in the production of anesthesia. And I confidently believe that, in the future, it will be relied on with the same certainty, and with as much confidence in its powers, as an arterial sedative, as we now do, when we enter upon the exhibition of either of the above, in those cases demanding their exhibition."

*Excito-Secretory System of Nerves*.—Dr. Marshall Hall of London has yielded the credit of discovery of the excitory secretory system of nerves to Dr. H. F. Campbell, of Augusta, Georgia, recently elected Professor of Anatomy in the Medical College of Georgia.

*New Cure for Intermittent Fever*.—R. H. Hadsden, M. D., in a report to the semi-annual session of the *East Tennessee Medical Society*, recom-



mends the use of *prepared* chalk and vinegar for intermittent fever. He says: "If the remedy should succeed in other hands as it has with me, it will prove a valuable acquisition in Intermittent Fever, especially the chronic form of that disease, though it may never supercede quinine in the cure of cases of recent occurrence."—*Southern Journal of Medical and Physical Science*.

*Treatment of Whooping Cough by Enemeta of Asafoetida*.—M. Ancon recommends as the most reliable and efficient remedy in this distressing and obstinate affection, Enemeta of Assafoetida. "He declares it to be a reliable and an heroic remedy, in the second and third periods of the disease. Little can be expected from it in the first period. Much of its efficacy will depend on the dose and mode of administration. To Infants eighteen months to two years old, three injections should be directed, each of them containing in the smallest possible quantity of vehicle fifteen grains of asafoetida, and two drops of *Sydenham's Liquid Laudanum* (*North American Medico Chirurgical Review*.)

*Gelseminum Sempervirens*—*Yellow Jessamine*.—Dr. J. A. Mayes in a report to the South-Carolina Medical Association thus alludes in his conclusion to this remedy, "I regard it as a direct sedative; more safe and manageable than veratrum viride, and more generally applicable in practice. I esteem it a most valuable adjuvant to other treatment in all cases where high arterial action exists, in which it is desirable to lessen the frequency of the pulse and to calm excitement, and where, as in cases of injury, it is desirable to lessen the irritability of the nervous system." He describes it as producing, in over-doses, most powerful prostration of the muscular system. He says: "Dr. Batchelor thus describes its properties," "The Gelseminum possesses Narcotic, Nervine, anti-spasmodic, and sedative powers. In full doses, it produces a sort of intoxication, languor and dizziness, double vision, inability to raise the eye-lids; and in an over-dose complete muscular prostration."

*Vesico Vaginal Fistula*.—Dr. Bozeman's button-suture, a modification of Dr. Simms clamp-suture, seems to be rapidly gaining favor in the *Surgical World* and will doubtless become the most acceptable mode of operating for this most obstinate affection.

*Amputation of the Cervix Uteri with the Ecraseur*.—Dr. McClintock recently performed this operation with satisfactory results. But little blood was lost, and it is for this reason that the ecraseus was employed.—*New York Journal of Medicine*.

*Belladonna in Incontinence of Urine.*—In the British Medical Journal a case is reported of incontinence of urine in a child eight years of age, which had existed since its birth. She had been treated with purgatives alkalies, blisters to sacrum, &c., without improvement. She was finally relieved by the use of  $\frac{1}{2}$  of a grain of Ext. Belladonna *night and morning*.

### METEOROLOGICAL OBSERVATIONS FOR JULY, 1857, AT ATLANTA, GA.

| JULY. | THERMOMETER. |         |         | BAROMETER. |         |         | WIND. | REMARKS.                     |
|-------|--------------|---------|---------|------------|---------|---------|-------|------------------------------|
|       | 7 A. M.      | 2 P. M. | 7 P. M. | 7 A. M.    | 2 P. M. | 7 P. M. |       |                              |
| 1     | 64           | 84      | 66      | 29.85      | 29.93   | 29.90   | S. W. | Hazy.                        |
| 2     | 56           | 78      | 62      | 27.83      | 29.93   | 29.85   | N. W. | Fair.                        |
| 3     | 58           | 80      | 60      | 27.95      | 29.95   | 29.90   | W.    | Hazy.                        |
| 4     | 58           | 68      | 60      | 29.93      | 29.95   | 29.95   | E.    | Cloudy—Rain $\frac{1}{2}$ .  |
| 5     | 56           | 68      | 64      | 30.05      | 30.12   | 30.10   | N. W. | Cloudy—Drizzly.              |
| 6     | 60           | 84      | 78      | 30.15      | 30.25   | 30.20   | E.    | Fair.                        |
| 7     | 62           | 88      | 78      | 30.15      | 30.20   | 30.15   | N.    | Fair.                        |
| 8     | 66           | 86      | 80      | 30.10      | 30.15   | 30.10   | E.    | Fair.                        |
| 9     | 66           | 84      | 75      | 30.10      | 30.16   | 30.15   | W.    | Fair.                        |
| 10    | 64           | 86      | 78      | 30.15      | 30.26   | 30.20   | E.    | Fair.                        |
| 11    | 80           | 88      | 74      | 30.25      | 30.27   | 30.20   | W.    | Fair.                        |
| 12    | 78           | 92      | 90      | 30.25      | 30.22   | 30.12   | W.    | Cloudy—Rain $\frac{1}{2}$ .  |
| 13    | 72           | 88      | 68      | 30.15      | 30.15   | 30.07   | W.    | Hazy.                        |
| 14    | 70           | 84      | 76      | 30.05      | 30.10   | 30.05   | W.    | Fair.                        |
| 15    | 68           | 90      | 80      | 30.        | 30.02   | 29.95   | E.    | Hazy.                        |
| 16    | 70           | 80      | 80      | 29.92      | 29.95   | 29.95   | S. E. | Cloudy—Rain $\frac{1}{2}$ .  |
| 17    | 68           | 86      | 84      | 29.98      | 30.05   | 30.03   | S. E. | Cloudy.                      |
| 18    | 74           | 92      | 84      | 30.10      | 30.07   | 30.05   | W.    | Fair.                        |
| 19    | 78           | 92      | 92      | 30.05      | 30.07   | 30.     | S. W. | Cloudy—Rain $\frac{1}{2}$ .  |
| 20    | 68           | 82      | 78      | 30.        | 29.92   | 29.92   | S. E. | Fair.                        |
| 21    | 68           | 78      | 78      | 29.90      | 29.92   | 29.92   | W.    | Cloudy—Rain $\frac{1}{2}$ .  |
| 22    | 70           | 82      | 72      | 29.92      | 30.     | 29.95   | N. W. | Hazy.                        |
| 23    | 66           | 84      | 78      | 29.95      | 30.     | 30.     | N. W. | Fair.                        |
| 24    | 70           | 78      | 72      | 30.        | 30.07   | 30.10   | S.    | Cloudy—Rain $1\frac{1}{2}$ . |
| 25    | 70           | 82      | 72      | 30.12      | 30.15   | 30.20   | S.    | Cloudy—Rain 1.               |
| 26    | 70           | 80      | 74      | 30.20      | 30.20   | 30.20   | S.    | Cloudy.                      |
| 27    | 76           | 78      | 72      | 30.25      | 30.22   | 30.20   | S.    | Cloudy—Rain $\frac{1}{2}$ .  |
| 28    | 70           | 86      | 80      | 30.20      | 30.20   | 30.15   | S.    | Cloudy—Rain $3-16$ .         |
| 29    | 70           | 80      | 76      | 30.20      | 30.15   | 30.15   | S. W. | Cloudy—Rain $\frac{1}{2}$ .  |
| 30    | 72           | 84      | 72      | 30.15      | 30.15   | 30.15   | S.    | Cloudy—Rain $\frac{1}{2}$ .  |
| 31    | 74           | 78      | 74      | 30.15      | 30.10   | 30.07   | S. W. | Cloudy—Rain $\frac{1}{2}$ .  |

Furnished by

J. G. WESTMORELAND, M. D.

*Veratrum Viride* in *Dysmenorrhœa*.—Dr. Gorham recommends in the Medical Independent, the use of *Veratrum Viride*. He begins two days before the expected period, and gives three drops of the tinct. every three hours, with directions to increase one drop at each succeeding dose, until nausea comes on, and then to reduce the dose again to three or four drops. In one case the nausea with retching was produced by the seven drop dose. The next case was vomited freely by the six drop dose; and the third sickened and vomited at the two drop dose. The frequency of the pulse was much reduced in all cases, and menstruation in each case came on at a later period by three or four days than the patient expected, but without the least pains, the relief appearing to be complete.

*Memphis Medical Recorder.*

### SUBSCRIPTIONS RECEIVED.

Drs. W. E. Wilson, Ill., 1st and 2d vols.; C. R. Moore, Ga., 2d vol.; John Rambo, Ga., 1st and 2d vols.; S. C. Hitchcock, Ga., 2d vol.; H. H. Johnson, Ga., 1st vol.; Wm. Booth, Fla., 2d and 3d vols.; J. J. Scott, Miss., 2d vol.; T. T. Mounger, Fla., 2d vol.; Dean & Dupree, Ga., 1st and 2d vols.; N. B. Drewry, Ga., 2d vol.; J. C. Story, Ala., 2d vol.; J. W. Kinnebrew, Ga., 1st vol.; John Rhea, Ga., 2d vol.; Wm. McLean, Ga., 2d vol.; S. H. Freeman, Ga., 2d vol.; Wm. Booth, Fla., 1st and 2d vols.; J. B. Forbes, Ga., 1st and 2d vols.

## UNIVERSITY OF NASHVILLE.

MEDICAL DEPARTMENT.—SESSION 1857-8.—The Seventh Annual Course of

Lectures in this Institution will commence on Monday, the 3d of November next, and continue till the first of the ensuing March.

THOMAS R. JENNINGS, M. D., Professor of Anatomy.

J. BERRIEN LINDSLEY, M. D., Professor of Chemistry and Pharmacy.

C. K. WINSTON, M. D., Professor of Materia Medica and Medical Jurisprudence.

A. H. BUCHANAN, M. D., Professor of Surgical Anatomy and Physiology.

JOHN M. WATSON, M. D., Professor of Obstetrics and the Diseases of Women and Children.

PAUL F. EVE, M. D., Professor of Principles and Practice of Surgery.

W. K. BOWLING, M. D., Professor of Institutes and Practice of Medicine.

WILLIAM T. BRIGGS, M. D., Adjunct Professor and Demonstrator of Anatomy.

The Anatomical Rooms will be opened for students on the first Monday in October, [the 5th]. A *Preliminary Course* of Lectures, free to all Students, will be given by the Professors, commencing also on the first Monday of October.

The Tennessee State Hospital under the direction of the Faculty is open to the Class of charge. A Clinique has been established in connection with the University at which operations are performed and cases prescribed for and lectured upon in the presence of the class.

Amount of Fees for Lectures is \$100; Matriculation fee (paid once only), \$5; Practice in Anatomy, \$10; Graduation Fee, \$25.

Good boarding can be procured for \$3 to \$4 per week. For further information or Catalogue apply to PAUL F. EVE, Dean of the Faculty.

NASHVILLE, Tenn., July 16, 1857.

# NEW ORLEANS SCHOOL OF MEDICINE.

*Situated on Common Street, opposite the Charity Hospital.*

The Regular Course of Lectures in this Institution will commence on MONDAY, the 2d NOVEMBER, 1857, and continue five months.

## FACULTY.

ERASMUS D. FENNER, M. D., *Professor of Theory and Practice of Medicine.*

ANTHONY A. PENISTON, M. D., *Professor of Physiology.*

THOMAS PENISTON, M. D., *Prof. of Clin. Med. and Auscultation and Percussion.*

SAMUEL CHOPPIN, M. D., *Professor of Surgery.*

ISAAC L. CRAWCOUR, M. D., *Professor of Chemistry and Medical Jurisprudence.*

HOWARD SMITH, M. D., *Professor of Materia Medica and Therapeutics.*

JOHN M. W. PICTON, M. D., *Professor of Diseases of Women and Children.*

D. WARREN BRICKELL, M. D., *Professor of Obstetrics.*

CORNELIUS C. BEARD, M. D., *Professor of Anatomy.*

THEODORE S. CLAPP, M. D., *Adjunct Professor of Anatomy.*

The Dissecting Rooms will be opened on the 15th of October, or earlier, if Students are in attendance and desire it. Clinical instruction will be given *daily* in the wards of the Charity Hospital, and three times a week at the College Dispensary.

The College is located within thirty steps of the Charity Hospital, an advantage not possessed by any other College in this country.

The Faculty of this Institution are amongst the duly elected Visiting Physicians and Surgeons of the Charity Hospital, and, according to a late Act of the State Legislature, "shall at all times have free access to the Hospital, for the purpose of affording to their Pupils practical illustration of the subjects they teach."

The great aim of this Institution is, not only to thoroughly indoctrinate the Student of Medicine in the fundamental principles of Medicine by abstract Lectures, but, by drilling him *daily* at the bedside of the sick man, to send him forth at once qualified to recognize and to treat Disease. For this great purpose, the Charity Hospital, situated at our very door, affords opportunities unequalled in this country.

The Faculty can confidently assert that dissecting material is more abundant in New Orleans than elsewhere, and that Practical Anatomy will be thoroughly taught in this Institution. Besides spacious, well-ventilated and well-lighted Dissecting Rooms for the use of Students, a large and well-arranged Private Dissecting Room is fitted up for the especial use of practitioners who matriculate in this Institution.

The Professors will take pleasure in aiding the Students to procure cheap and comfortable board and lodging.

|   |          |
|---|----------|
| Amount of Fees for the full Course of Lectures..... | \$105 00 |
| Matriculation Fee (paid but once).....              | 5 00     |
| Dissecting Fee.....                                 | 10 00    |
| Graduating Fee.....                                 | 25 00    |

For any further information, address  
NEW ORLEANS, May, 1856.

E. D. FENNER, M. D., *Dean of the Faculty.*  
No. 5 Carondelet street.

## UNIVERSITY OF LOUISVILLE—MEDICAL DEPARTMENT.

The Regular Lectures in this Institution will commence on the first Monday in November next, and continue until March. A preliminary course will be delivered without extra charge, at the College and the Marine Hospital, during the month of October.

### Medical Faculty.

CHAS. W. SHORT, M. D., Emeritus Professor of Materia Medica and Medical Botany.

HENRY MILLER, M. D., Professor of Obstetric Medicine.

LUNSFORD P. YANDELL, M. D., Professor of Physiology, and Pathological Anatomy, and Dean of the Faculty.

BEN. R. PALMER, M. D., Professor of Descriptive and Surgical Anatomy.

J. LAWRENCE SMITH, M. D., Professor of Medical Chemistry and Toxicology.

ROBT. I. BRECKINRIDGE, M. D., Professor of Materia Medica.

JOSHUA B. FLINT, M. D., Professor of the Principles and Practice of Surgery.

LEWIS ROGERS, M. D., Professor of Clinical Medicine.

THEODORE S. BELL, M. D., Professor of the Theory and Practice of Medicine.

ARCHIE B. COOK, M. D., Demonstrator of Anatomy.

Ample opportunities for Clinical instruction are afforded by the Marine Hospital and the University Clinique. Anatomical material has always been equal to the demand. Board in respectable families can be procured at from \$3 to \$4 a week. Fees for the entire course, \$105. Matriculation ticket, \$5. Dissecting ticket, \$5. Hospital ticket, \$5. Graduation fee, \$25.

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L. P. YANDELL, M. D., Dean.



